PRINCES
OF THE YEN

"A powerful work." **—Eisuke Sakakibara, ex-Vice Minister of Finance**
***Weekly Economist*, Tokyo**

"This is no ordinary economics book. Readers will find the curtains pulled away from their eyes. Given the time scale covered – the whole of the twentieth century – and its broad scope – looking at central bankers' actions worldwide – this superb book will make you marvel at how fascinating economics really is. Richard Werner could see through the Bank of Japan's smokescreens. The process of disclosing all these facts step by step is as gripping as a thriller. His analysis has been highly appraised internationally, being prominently covered in the *Economist* and read by Federal Reserve chairman Alan Greenspan."

—Takashi Tachibana, price-winning author, *Shukan Bunshun, Tokyo*

'This thought-provoking book sheds light on the masterminds of Japan's economic policies. The author gives stunning accounts of how a handful of the BoJ's elite distorted the nation's financial policies with a view to reforming the country's economic structure."

—The Asahi Shimbun, Tokyo

'The book deals not just with economic problems, but also unmasks the true causes and power brokers behind those very problems. ... It depicts the BoJ princes' clandestine battle to revive the 'American-style liberalized economy,' as it existed in the Japan of the 1920s, and to dismantle the controlled war economy, which enabled the post-war high growth."

—The Mainichi Newspaper, Tokyo

"Legitimate criticism of the Bank of Japan." **—Kazuo Ijiri, *Voice*, Tokyo**

"This book makes for a fascinating read. Werner says the claims by the BoJ that they are doing all they can to stimulate a recovery by lowering interest rates are 'just not true.' He goes as far as including a mafia-like list of names and provides evidence about how Sasaki, Maekawa, Mieno and soon-to-be installed Toshihiko Fukui have in an unbroken line been trying to control Japan. I first met the author of this thought-provoking book eleven years ago. He already was a famously accurate strategist, using his analysis to forecast stock market movements with a high degree of precision."

—Kiyoshi Imai, Professor of Economics, Tokyo

"We are all baffled at why on earth Japan's recession has continued for over ten years. Countless scholars have come and gone explaining the causes and remedies for the recession. We should seriously heed this author's warnings."

—Yoichi Masuzoe, *Denki Shinbun*, Tokyo
since February 2014: Governor of Tokyo,
formerly Professor of International Politics, Member of the
House of Councillors, Japanese Parliament

The best book ever written about the Japanese financial-industrial system (and I've read hundreds during the last 40 years).

I am an expert on the financial-industrial system of Japan, and I have co-authored two books with John Carrington and written another two, but this book escalated my detailed knowledge of that system by several orders of magnitude. This is an astonishing, timely and well-written book. Werner's observations have a direct relevance to the European and American contexts.

If you are a student of economics, buy this book. Your teachers and lecturers, trapped in the prevalent neo-classical mindset, are unlikely to tell you anything as relevant as this book will. Challenge their complacency. And if you are a Professor of Economics, get yourself re-educated by buying, reading and understanding this book. If you are a member of the public or a civil servant or anyone interested in economic policy and how we could have a more flourishing economy, buy this book - it tells you about that. Finally, if you are a politician, please read this book, for it contains better growth-assisting policies than any being currently taught, reported upon, or practised in the West, and you should learn about these and how to to apply them.

A truly great book and a curtain-raiser for Werner's „New Paradigm in Macro-Economics" which is equally excellent."

—George Tait Edwards, expert on Shimomuran macroeconomics and
editor of the *London Progressive Journal 2015*

Also by the same author

The New Paradigm in Macroeconomics: Solving the Riddle of Japanese Macroeconomic Performance (2005)

> Modern mainstream economics is attracting an increasing number of critics of its high degree of abstraction and lack of relevance to economic reality. Economists are calling for a better reflection of the reality of imperfect information, the role of banks and credit markets, the mechanisms of economic growth, the role of institutions and the possibility that markets may not clear. While it is one thing to find flaws in current mainstream economics, it is another to offer an alternative paradigm which can explain as much as the old, but can also account for the many 'anomalies'. That is what this book attempts. Since one of the biggest empirical challenges to the 'old' paradigm has been raised by the second largest economy in the world - Japan - this book puts the proposed 'new paradigm' to the severe test of the Japanese macroeconomic reality.

Where Does Money Come From?: A Guide to the UK Monetary & Banking System (co-author) (2014)

> More than a century after Hartley Withers's "The Meaning of Money" and 80 years after Keynes's "Treatise on Money", the fundamentals of how banks create money still need explaining and this book meets that need with clear exposition and expert marshalling of the relevant facts. According to The Bank of England "By far the largest role in creating broad money is played by the banking sector...when banks make loans they create additional deposits for those that have borrowed", yet this little known fact remains contrary to public perception. Based on detailed research and consultation with experts, including the Bank of England, this book reviews theoretical and historical debates on the nature of money and banking and explains the role of the central bank, the Government and the European Union.

PRINCES OF THE YEN

Japan's Central Bankers and the Transformation of the Economy

RICHARD A. WERNER

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To Romi, Josephine and Elise

"So do not be afraid of them, for there is nothing concealed that will not be disclosed, or hidden that will not be made known."
(Matthew 10:26)

At that time Jesus said, "I praise you, Father, Lord of heaven and earth, because you have hidden these things from the wise and learned, and revealed them to little children."
(Matthew 11:25)

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Acronyms and Abbreviations

APEC	Asia-Pacific Economic Cooperation
BIBF	Bangkok International Banking Facility
BIS	Bank for International Settlements
BoJ	Bank of Japan
CP	Commercial paper
CPI	Consumer price index
ECB	European Central Bank
EMEAP	Executives' Meeting of East Asia-Pacific Central Banks
EMI	European Monetary Institute
EMS	European Monetary System
EMU	European Monetary Union
ESB	Economic Stabilization Board
ESCB	European System of Central Banks
EU	European Union
EDI	Foreign direct investment
FILP	Fiscal Investment and Loan Program
FSA	Financial Services Agency
FY	Fiscal year
GATT	General Agreement on Tariffs and Trade
GDP	Gross domestic product
GHQ	General Headquarters of SCAP
GNP	Gross national product
IBJ	Industrial Bank of Japan
IMF	International Monetary Fund
JGBs	Japanese government bonds
JDB	Japan Development Bank (now Development Bank of Japan)
LDP	Liberal Democratic Party of Japan
LTCB	Long-Term Credit Bank of Japan
LTCM	Long-Term Capital Management
METI	Ministry of Economy, Trade and Industry (formerly MITI)
MITI	Ministry of International Trade and Industry
MoF	Ministry of Finance
NCB	Nippon Credit Bank
NSDAP	Nationalsozialistische Deutsche Arbeiterpartei
OECD	Organization for Economic Cooperation and Development
SCAP	Supreme Commander for the Allied Powers
WPI	Wholesale price index
WTO	World Trade Organization
YoY	Year on year

Note on the Representation of Personal Names: The ordering of first names and surnames follows the conventions of the English language.

Foreword to the New English Edition

I am delighted that my first book, *Princes of the Yen*, is now available in a new English edition. Some readers may already know that a documentary film based on it, with the same title, has recently become available for free viewing on Youtube.

The original book was published in Japanese in May 2001 (two years before Mr Fukui was appointed as governor of the Bank of Japan) and it became an instant number one bestseller in Japan, beating Harry Potter for six weeks on the bestseller lists. Despite this, it had been difficult to find a publisher willing to take on the English language edition. Several US and UK publishers that had been interested suddenly pulled out. I had had hopes that one particular prestigious US-based publisher would accept it, since its chief executive kindly told me in a personal meeting in New York: "I have read it. It's the best business book I've ever read" and had assured me that "of course we will publish it".

I had warned him that he might be contacted by particular people and asked not to publish it, as its content or its author are apparently considered "dangerous" by some Americans (as I had heard from other members of the Foreign Correspondence Club in Tokyo, who had told me that US journalists with secret service connections were using such an adjective for me and my book). This seasoned US publisher responded with a confident "Nobody can stop me from publishing your book". Sadly, not long after our meeting, and back in Tokyo, I received an email from him stating that he would unfortunately not be able to publish *Princes of the Yen*, after all.

I had myself received a visit from an important government agency in the US, which seemed to suggest that some influential people were not happy about the publication of my book. Clearly a lot of pressure was being applied on US publishers not to touch it. As the months went by and any English-language launch was now likely to be two years after the Japanese debut of *Princ-*

es, I felt I had to make some sort of compromise so as not to delay a US publication any further. As a result, I pulled out the last chapter from *Princes*, which describes my encounter with Alan Greenspan and my prediction that he was about to inflate an even larger stock market bubble over the coming years, that this bubble would collapse, and "a large proportion of private sector wealth will be wiped out", "bankruptcies will rise. Bad debts at banks will rise. Credit will shrink. Deflation will expand. Events of the proportion of the Great Depression will once again become possible."

Without this brief chapter on the US financial system, and having settled for a much smaller academic publisher with little marketing power, *Princes* was eventually published in the US in 2003, just as Toshihiko Fukui became Governor of the Bank of Japan.

In this new edition the original 2003 English edition is reproduced, and in addition this long lost last chapter is for the first time made available in the English language (it has, of course, been available in Japanese since 2001). Now that the so-called 'Global Financial Crisis' of 2008 has taken place, as expected triggered by Greenspan's policies, I should hope this chapter is less controversial than it might have appeared to some in 2001.

Meanwhile, my warning in chapter 19, that the far too powerful and too unaccountable ECB was likely to create credit bubbles, asset booms, banking crises and major recessions in the eurozone, has been in print since 2003, like all the other chapters. It is sad that this prediction nevertheless quickly came to pass as under the ECB's watch bank credit in Ireland, Portugal, Spain and Greece grew by about 20% to 40% year-on-year from about 2004 onwards. The aftermath of the subsequent large-scale financial crises in the eurozone, recessions and large-scale unemployment – in Greece and Spain with about 50% youth unemployment - is still keenly felt in Europe.

While much has happened since the 2003 publication of the English version of *Princes of the Yen*, the book has remained more relevant than ever. Its exposure of the bankers' alchemy – that well over 90% of our money supply is created by banks out of nothing through their extension of loans (chapter 4) – has been ahead of its time, and it is only recently (in 2014) that for the first time empirical evidence has been provided that banks are not financial intermediaries and that, indeed, banks create money out of nothing (see Werner, 2014a, 2015). I have also recently shown why banks can do this, but not other firms (even so-called 'non-bank financial institutions' and 'shadow banks'; see Werner, 2014b). The looming publication of my empirical proofs seems to have once again caused some concerns in illustrious circles, apparently even triggering the Bank of England's 2014 admission that banks indeed create the money supply out of nothing.

As the issue of banks creating the money supply has been brought to greater public attention, there are now a number of organisations and individuals

who are publicly criticising such a system (which is healthy), and who demand that the privilege to create money be taken from banks and instead given to one central authority (not a good idea). They range from the FT economics correspondent Martin Wolf to campaign groups such as Positive Money and casual book authors. This motley crew seems to have in common that it often appears at events together with the Bank of England and organisations sponsored by George Soros, and that it seems to share a somewhat skewed analysis of the matter. For instance, I have noticed that they share the idea that it would be better if the commercial bankers no longer had these powers to create money, and if these powers had instead been transferred to the Bank of England. This would at least explain the Bank of England's support for such critique.

It is however a central contention of my work, illustrated in *Princes of the Yen*, that the problem has been that central banks and their decision-makers have been far too powerful and unaccountable. As Lord Acton aptly put it: "Power corrupts. Absolute power corrupts absolutely." (Less known is that this son of a Bavarian princess, buried in Tegernsee, Germany, seems to have been aware of the role of excessively powerful big banks and banking dynasties.)

Some may think that central bankers should have an incentive to avoid banking crises, as these might make them look bad. To the contrary, I have been predicting that each banking crisis will be used by the central bankers to still further expand their powers. That prediction has also come to pass with the vastly expanded post-crisis powers of the Bank of England and the ECB. This regulatory moral hazard means that central bankers have had incentives to create further boom-bust cycles. As this books shows, crises also serve to introduce major changes, even economic and political 'transformations'. It seems the ECB is now intent on ruining the German banking landscape with its 1,500 community banks that have supported small firms and family businesses – the backbone of German economic success – for the past 200 years. The ECB's policies are set to halve the number of community banks within five years, and it seems the goal is, after a banking crisis due to an engineered property boom in Germany, fuelled by the ECB's policies, to reduce their numbers to only two that can be nationalised, privatised and turned into just another bland too-big-to-fail bank so loathed by the public for their unscrupulous methods.

Given the already excessive and unchecked powers of central banks, it is disconcerting that central bankers are currently openly propagating the abolition of cash, while they are developing their own digital substitute. Should bank credit creation also be abolished, this would elevate central bank power into yet another unprecedented dimension. It would create the tools for totalitarian control. Central banks would then directly control all money and all

transactions in the economy, without the diffusion of their powers via banks, and without the public having the possibility to avoid their monitoring and their control through the use of cash. Dissidents' access to goods and services could easily be switched off centrally.

The single most important – and sinister – trend in the twentieth century has been that of the centralisation of power. This has accelerated in the 21st century. Thus the only solution that is in our common interest can be to break up the centralised power over money, not to increase it. Central banks should not be given a monopoly over the creation and allocation of money. Their history has demonstrated that they have consistently abused their existing powers, as I show in *Princes of the Yen*. Decentralisation of banking is badly needed in the UK, where five banks account for over 90% of deposits. The introduction of regional currencies issued by local authorities, together with credit creating community banks seems a far more attractive option than to place ourselves even further at the mercy of the already excessive powers of the central planners at the central banks, whose severe policy failures have been well-documented, not least in *Princes of the Yen*. I hope that this new edition will continue to stimulate the ever-widening debate on the important issue of our money and those who control the economy through it.

Richard A. Werner
Winchester, 12 September 2016

Prologue

In January 2001, the ambassador to Japan of a European country told me about his recent New Year's Eve party at his residence in Tokyo. Among the guests was a high-ranking official from Japan's Ministry of Finance (MoF). Most guests were in a joyful mood. They looked forward to the dawn of the twenty-first century. Champagne was flowing and the party was in full swing. But not everyone was happy.

"I noticed," the ambassador told me, "as the clock approached midnight, this gentleman seemed to be getting sadder and sadder. He was from the Ministry of Finance, and he looked really down. I wondered what the problem was. It was most unusual, I thought. Finally, as the clock struck midnight, he came up to me and told me, in a very sad voice:

"'Now ... it's all over...'

"'What do you mean?' I asked him.

"'We lost our name,' he replied. 'It's over... From January 2001, Ōkurashō [the Japanese name for Ministry of Finance] is gone.'

"I tried to console him by saying, 'Well, but it's just the name. You shouldn't worry too much about a name. The ministry is still there. You still have power and influence.'

"But he said: 'If they at least had left us the name ... They had already taken away our power. It's gone...But that they would also take away our name...' He shook his head despondently."

Not noticed by many English-speakers, to whom the old Ōkurashō was simply known as the Ministry of Finance, a long and illustrious history ended abruptly in January 2001. For much of the past century, at least according to the letter of the law, the Ōkurashō had been the most powerful institution in

Japan. Its grand old name is more correctly translated as "Great Storehouse Ministry" or "Great Treasury Ministry" and its history goes back to the time when taxes were paid in kind and the ministry literally was the storehouse of the rice that would arrive from all over the country.

Structural Change

The general public has not shed any tears over the demise of Ōkurashō. MoF, the Finance Ministry, is generally held responsible for the most flagrant economic mismanagement in modern peacetime Japanese history: the creation of the bubble of the 1980s and the long recession that followed in the 1990s.

The recession had produced the general conviction that Japan's old economic system, headed by its leading bureaucracies, did not work anymore and thus had to be reformed drastically. Most commentators now claim that structural changes are "badly needed." Prime Minister Junichiro Koizumi's most repeated slogan is "No recovery without structural reform." Senior members of the Japanese central bank have been calling for far-reaching structural reform on an almost daily basis. These voices claim that liberalization, deregulation, and privatization, in other words, the introduction of U.S.-style capitalism, is necessary for Japan's economy to recover.

But is it really necessary to abandon Japanese-style capitalism? One would think so, when considering the dismal performance of the economy during the 1990s. But it is strange that Japan's economic system was far more closed, cartelized, and controlled in the 1980s, and yet nobody complained that its economy was growing too slowly then. The same applies to the 1950s or 1960s, when an almost completely cartelized economy delivered double-digit growth. Moreover, the U.S. economy itself still suffers from business cycles and downturns. It seems, then, that the same economic structure can deliver high or low growth, and growth performance depends on other factors as well. This book shows that the Japanese recession was indeed due to the main force driving the business cycle—money. It is not by coincidence that the main proponents of structural change are precisely those who are in control of Japan's money.

The Defiant Bank of Japan

The central bank has consistently defied calls by the government, finance minister, and prime minister to create more money to stimulate the economy and end the long recession. At crucial junctures, such as in 1992, 1993, early 1995, and much of 1999, the Bank of Japan (BoJ) even actively reduced the amount of money circulating in the economy. This shrank purchasing power, reduced domestic demand, rendered the government's currency intervention ineffective, and strengthened the yen, thus aborting emerging recoveries.

Lacking sufficiently supportive monetary policies, the government had to rely on fiscal policies. Those were not effective, and instead produced the largest national debt mountain of any industrialized country.

The big puzzle of the 1990s is just why, despite record unemployment and deflation, the Bank of Japan failed to expand the amount of money further and thus create a recovery, reduce deflation, and stabilize employment. Sometimes fear of inflation is given as the answer. But Japan has witnessed sharp falls in inflation during the first half of the 1990s and outright deflation in the second. When prices rise and there is inflation, we know that monetary policy is too loose and too much money is being created. Then the central bank needs to tighten. When prices fall and there is deflation, the central bank has a duty to create more purchasing power. In general, it is the job of the central bank to create sufficient amounts of money to keep the actual growth rate close to potential and hence avoid both inflation and deflation.

Given the obvious deflation problem, the Bank of Japan admitted a while ago that fear of inflation is not the reason for its cautious stance. To the contrary, for many years now the Bank of Japan has been saying that it is trying hard to stimulate the economy, noting that it has lowered interest rates to zero. But, it claims, the problem has been a lack of demand for money. Yet it is clear that the largest demand for money in the world is located precisely in Japan. First, the government sector demands record amounts of money to fund its fiscal spending. Second, the many small and medium-sized firms that are Japan's main employers would like to borrow money. But the banks, burdened with bad debts, have only been willing to lend to larger, lower-risk borrowers. That is why the central bank needs to step in and substitute for their lending.

Sometimes the Bank of Japan claims that it is already injecting plenty of money into the economy. But it has mostly poured its money into the very narrow money market to which only banks have access. At other times, worries about deflation are countered by its spokesmen with the assertion that deflation is due to desirable structural changes and hence good. But if those structural changes have indeed made Japan's economy more productive, this would raise Japan's potential growth rate, leaving an even larger gap with actual growth. In that case, the central bank would have to create even more money to reduce the deflationary gap.

The most recent argument by central bankers, apparently also backed by the prime minister and his minister of economic and fiscal policy, is that there is too much "excess capacity" in Japan. This is true, and another way of putting it would be to say that aggregate supply is larger than aggregate demand. But instead of drawing the logical conclusion that demand should be stimulated—which the central bank could easily do—the advice is given to restrict the supply by closing down firms. Reminiscent of the ill-fated policies of certain depression-era politicians in Japan, Germany and the United States,

this "excess capacity" is said to result in "excess competition," which must be dealt with through bankruptcies. Ironically, this argument is proposed by the very same commentators who also argue that Japan needs more deregulation, because it suffers from a "lack of competition."

The pattern is clear: While the Bank of Japan's arguments vary—and are quickly changed, when countered—they always come to the same conclusion, namely that the central bank's monetary policy has been appropriate and that the blame lies with Japan's economic structure.

The Bank of Japan Could Have Helped, But It Didn't

Money is normally created by banks. It is precisely because banks did not lend that the central bank needed to inject more money directly into the economy. It would thus act as the banker to the nation—as other central banks have done before, and as, indeed, the Bank of Japan did after 1945, when banks' balance sheets looked far worse than in the 1990s. This worked so well in the years after 1945 that credit growth quickly recovered and the economy boomed. But throughout much of the 1990s, the Bank of Japan failed to take these tested and tried policies and failed to create enough money for a sustained economic recovery. Moreover, it has refused to lend to those who needed money most, the government and the small firms. The Bank of Japan also has had it in its power to delete the entire mountain of bad debts in the banking system without any costs to itself, the tax payer, or society at large. Yet it chose not to act. Why?

It is natural to start with the incompetence hypothesis. Incompetence may indeed explain the actions of some of the actors in this drama. The Ministry of Finance, for instance, and the political leaders during the 1990s could have created a recovery simply by changing the way they funded their fiscal expenditure. Instead of borrowing from the public by issuing bonds—thus draining the money from the economy—they could have funded the public sector borrowing requirement by direct loan contracts from banks. When banks lend, they create money out of nothing, without withdrawing it from other parts of the economy. This way, fiscal policy would not have crowded out private-sector activity yen by yen, as actually happened. Had they fully understood this, I am sure they would have used this method to create a recovery. However, this mechanism is little known among economists, whether in Japan, Europe, or the United States.[1]

The more obvious and better-known mechanism is the one prescribed even by introductory economics textbooks: The central bank can inject money directly into the economy, even when banks are bankrupt, by increasing its purchases of assets, including government bonds.[2] Yet the central bank has denied the truth of this fact for years—out of incompetence? The deeper I

researched into the issues and their history, the clearer it became that the leaders at the Bank of Japan have personally been very familiar with Japan's predicament and how to end it. In several previous recessions that were due to a credit crunch (such as the 1960s slump), the central bank increased lending to the corporate sector and the government. Also today, the central bank has many options available to achieve this. To name a few, it could purchase debt paper issued by firms, lend to the government, buy more bonds, buy real estate and turn it into public parks, or just print money and hand some to each citizen. In all cases, purchasing power would increase and demand would be stimulated. Printing money might also weaken the yen, which would help exports.[3] This would not produce inflation, since the very problem and cause of the recession is lack of money and hence deflation.

An economic recovery could have been engineered at any time during the 1990s by increased central bank credit creation. Japan could have had high growth throughout the 1990s if the Bank of Japan had wished it to happen.

All this is not rocket science. Moreover, today central bankers can look back on the rich history and experience of the Bank of Japan or other central banks that have dealt with the same issues, such as the German central bank or the U.S. Federal Reserve. So the puzzle remains: Why did the Bank of Japan not create more money?

Concerning the motives of the players, there is little doubt that over the 1990s, the Ministry of Finance, just as the many governments that came and went, had every incentive to create an economic recovery. The ministry, in the firing line of fierce criticism, was painfully aware that a long recession endangered its legal predominance and that of the postwar economic structure. Upon closer examination, the motives of the central bank seem less clear.

By 1992, when I was a visiting researcher at the Bank of Japan, I had discovered the importance of credit creation and its allocation. I realized that Japan's recession was going to get worse and unemployment was going to soar if the central bank did not implement the right policies. Interest rate reductions and fiscal policy were not sufficient. What was needed was more central bank money creation. But at the time the central bank was doing the opposite, actively withdrawing money from the economy. I could not understand why and kept asking different members of the Bank of Japan to give me an answer. Finally, one particular central banker explained to me: "If we printed more money, we would get a recovery. But then nothing would change. Japan's structural problems would not be solved." At the time I could not believe his words. Would the Japanese central bank intentionally prolong the recession in order to change the economic structure? Would it be the job of the central bank to implement such economic and social change—especially change of such scale, at such economic and human cost, and in this opaque fashion? By 1998 suicides had reached a postwar high, many induced by the recession.[4]

The Bank of Japan's official statements about its policy have been highly contradictory. On one hand, the central bank has insisted that the recession was due not to its policies but to the economic structure. That's why structural changes, not monetary stimulation, were necessary—as its officers never tire of repeating. Yet its staff (including its governor) have also said that they did not want to stimulate the economy (thus admitting that they could), because this would put off "badly needed" structural changes.[5] Central bank staff even argue that significant monetary easing "could cause harm" by inducing "a further delay in the progress of structural adjustment."[6] Adam Posen, an economist at Washington's Institute for International Economics, has therefore concluded: "Between a process of elimination, and careful reading of the statements of BoJ policy board members, I am led to the conclusion that a desire to promote structural change in the Japanese economy is a primary motivation for the Bank's passive-aggressive acceptance of deflation."[7] If the reader is as skeptical as I was in the early 1990s, then this is a conclusion that is hard to accept.

The Rise and Rise of the Bank of Japan

If a recovery would prevent structural changes, then this means that structural changes are not necessary for a recovery. So why are structural changes needed? While the Japanese system has had many problems and there is room for improvement—especially when it comes to increasing the quality of life, the size of houses, leisure time available, the number of parks, and so on—it is not clear that a U.S.-style economic system will significantly improve living standards. A U.S.-style economic system also has disadvantages. The Japanese economic system had many positive aspects that could have been preserved if a public debate had occurred about the structural change agenda.

The fact is that the recession of the 1990s has indeed triggered a structural transformation that many experts refer to as "remarkable."[8] The structural and administrative reforms of the 1990s did not just create losers. While former Ōkurashō bureaucrats may have been close to tears on New Year's Eve 2000, the champagne corks were perhaps popping elsewhere. When the Ōkurashō was scrapped, its tasks had already been either abolished or reassigned to other agencies. In 1998 monetary policy was put into the hands of the newly independent Bank of Japan and regulation of the financial sector was put into the hands of the independent Financial Services Agency (FSA). Since many of the influential FSA staff hailed from the central bank, a clear winner had emerged from the administrative reshuffling.[9] That was none other than the Bank of Japan, MoF's long-standing rival. It had finally triumphed and was now more powerful than ever before.

Despite the ministry's dominant legal status, the central bank had the better cards: It was in charge of a little-known and extralegal credit control mechanism. Hiding behind the smoke screen of traditional interest rate policies, its decision makers remained entirely unaccountable. All this was possible because of a lack of transparency and a lack of meaningful accountability by the central bank for its monetary policy.

Central Bank Independence

The new Bank of Japan Law was proposed in 1997 as part of Prime Minister Hashimoto's administrative reform program. At the time, the financial press argued that the new law merely meant a "slight increase in autonomy" for the Bank of Japan.[10] The deputy governor of the Bank of Japan at the time, Toshihiko Fukui, lobbied press and politicians and argued that the new Bank of Japan Law "would allow the bank to make monetary decisions faster and more flexibly, and help it gain more credibility from the financial markets."[11]

This is not what happened—just as I had feared in 1997, when the new law was being debated. By that time I had done enough research to become convinced that the new BoJ Law was against the interests of the Japanese people, and by example also a threat to democracies in other countries. So I did my best to stop its passage. I faxed a letter to as many parliamentarians as I could. I also tried to arrange meetings with the members of the relevant parliamentary committees. Many ignored my faxes and phone calls. But a substantial number did take the time to see me and hear what I had to tell them. But it was an uphill battle. Just as I had thought myself before my years of research on the Bank of Japan, most experts also felt that central bank independence was a good thing. We will see later in this book that the arguments in favor of central bank independence, whether in Europe or Asia, have serious flaws. This includes the argument that the German Bundesbank's great success was based on its independence. The truth, as we shall see, was quite the opposite.

The new Bank of Japan Law was passed. And that is why today the government has no more control over monetary policy. After the stock market falls of 2001 and 2002, many politicians called for the resignation of the BoJ governor. Mr. Hayami responded to such criticism by demanding that Japanese people give up lifetime employment and face less job security. His own job security was assured. There was nothing the government could do to sack him. Under the new Bank of Japan Law he was not doing anything wrong, because it does not clearly state that it is the job of the central bank to achieve healthy economic growth.

There is no mechanism for politicians to exert their will, except changing the central bank law again. It is not the government but the BoJ that decides whether we will have a boom or a recession.

Just Who Are the Central Bankers?

While the central bankers are good at keeping a low profile, their career paths tend to be more predictable than those of ordinary citizens or politicians. Few people would venture to guess who the next finance minister is going to be or how long the current prime minister will last. During the postwar era there has been no such uncertainty about the top job at the Bank of Japan.

Japan has had twenty-six prime ministers in the fifty-eight years since the war. However, a much smaller number of people have been in control of Japan's money and hence the heart of its economy. Known as "princes" by their colleagues, they were the men behind the Bank of Japan. Like the puppeteers of Japanese *bunraku*, dressed in black and moving in the background, these little-known central bankers shaped key events in Japan's postwar history. Politicians, governments, and bureaucrats—even the mighty Ministry of Finance—became unwitting puppets in their money game. Yet until now very little has been known about them and their policy tools. I hope this book will shed some light on their activities and make the reader more aware of the power wielded by unelected central bankers.

Even today, a large number of journalists and commentators seem quite sure about who is going to be the next Bank of Japan governor. In May 2001, in the same week this book was published in Japanese, Toshihiko Fukui, head of the Fujitsu Research Institute, staged an attempt to take over from Governor Hayami as the new governor. The media had been touting Fukui as an "impressive" candidate, the leading contender "in the running for the BoJ governorship," and "in line for the top job."[12] The *Nikkei*, Japan's leading financial newspaper, prematurely introduced him on its cover page, with a photo, as the new governor. In the event, Governor Hayami refused to resign. However, his five-year term ends in March 2003. Until December last year, despite other plausible candidates, the media agreed on the likeliest successor: Toshihiko Fukui, called the "compromise candidate at the top of the list" by the *Financial Times*. Why? He is an "effective leader, capable of steering the BoJ through the murky waters that lie ahead."[13]

In actual fact, in postwar history there has been little compromise in the selection of the true heads of the Bank of Japan. The same unanimous case was made by the media and well-informed observers before Yasushi Mieno became governor in 1989, and ten years before that, when Haruo Maekawa became governor. Again, ten years earlier, the insiders knew that Tadashi Sasaki would become governor. We find in this book that Fukui, Mieno, Maekawa, and Sasaki have many things in common. The least of those is that they were at the helm of the central bank for ten years each, and they all played a leading role in the Japan Association of Corporate Executives (Keizai Dōyūkai), which has argued since the 1970s that Japan should radically change its economic structure. More ominously, all of them had been known as "princes" since

their youthful early years at the central bank— the anointed future heads of the Bank of Japan. It was an epithet that was not awarded lightly: only one central banker per decade could become a prince.

In its earlier Japanese version this book contributed to an increasing awareness by the Japanese public about these princes, their goals and their way of implementing their policies—including Fukui's pivotal role in the events that led to the creation of the financial bubble of the 1980s and the decade-long period of underperformance in the 1990s. Moreover, more politicians appear to understand that the Bank of Japan has been the main culprit behind the Japanese malaise and that a more supportive policy by the central bank is a necessary condition for an economic recovery. Perhaps as a result, Prime Minister Koizumi stated in late December 2002 that he would appoint as governor of the Bank of Japan only someone who is "aggressive in fighting deflation."[14] This should effectively have ruled out "prince" Fukui as contender: not only his past actions but also his recent statements seemed to indicate that he is unwilling to fight deflation.[15] To the contrary, he demanded that more companies should be bankrupted and that Japan's unemployment rate should rise further to at least 8 percent.[16] But what is said is not always what is done.

If an outsider had been appointed as new Bank of Japan governor, in place of Fukui, the old guard at the Bank of Japan would likely have resorted to a well-tried method of staying in charge in such cases: we will see in this book that whenever a former Finance Ministry official or an outsider from the private sector became Bank of Japan governor, he would be kept in the dark about the—allegedly "technical"—details of the actual monetary policy implementation, namely the quantity of the central bank's credit creation. These were decided by the deputy governor, one of the princes, who would after five years become official governor.

During the first five years, the official governor would have control over the minor policy tools of interest rates and banks' reserves with the central bank, while the old guard would remain in charge through their control over the quantity of credit.

In the event, Toshihiko Fukui once again made the race, just as had been planned thirty-five years ago. Back in 2000, when I was finishing the Japanese version of this book, I predicted that he woud become the next governor of the Bank of Japan. The fact that he was duly appointed, despite contrary statements by the prime minister and by an administration famous for surprise appointments, merely serves to demonstrate the extent of the power wielded by the princes.

Public Debate Is Needed

Nobody knows better than prince Fukui that the introduction of an inflation target, now thought to be favored by the prime minister, is also not itself a

solution. He knows that what is needed are policies to expand credit creation. Instead, just like the Reichsbank during the Weimar Republic, the Bank of Japan has been implementing inappropriate credit policies that go significantly beyond the call of duty without the necessary accountability. There is a danger that the European Central Bank and the U.S. Federal Reserve are following in the footsteps of these central banks.

Even central bankers are human. As such, they are as prone to errors and acts of selfishness as anyone else. What they need is the right incentive structure to limit these tendencies, namely, democratic checks and balances. Implementing such checks does not mean that money should be debauched and inflation allowed. To the contrary, history teaches that the only guarantor of stable money is accountability of a central bank that has been given the right policy goals.

A broader debate about the correct role of central banks in democracies is necessary. Any such debate must be based on knowledge of the facts and the history of central banking. This includes the realization that central banks often may use interest rates as a smoke screen to distract others from their true policies, which usually can be judged better when measuring the quantity of credit.

I am happy to report that my book has made a modest contribution to this effort. The Japanese version was published with a print run of 150,000 copies, becoming a number one best-seller. Many members of parliament read it. Several LDP members took it to heart and established the LDP Central Bank Reform Research Group. I hope the English edition will contribute to the stimulation of such debate also in other countries.

Tokyo, 28 February 2003
Richard A. Werner

1 Japanese Lesson

New Era Dawning in Japan

Fundamental changes in Japan's economic, social, and political system have happened only twice in modern Japanese history: during the Meiji period, in the late nineteenth century, and during war and defeat sixty years ago. In both cases, crises triggered the change. The threat of colonization by foreign countries propelled the Meiji reforms. The Great Depression, the Pacific War, and consequent defeat were the triggers for the second major mutation.

The postwar miracle of high growth was, despite all its achievements, largely a quantitative change, one that took place within the unchanged economic and political institutions that had earlier been put into place. Today, Japan is once again at a crossroads. The crisis of the 1990s has spelled the end of the "Japanese-style" economic system as we know it. Japan is now in the process of switching to a fundamentally different form of economic organization, namely, a U.S.-style free market economy.

Back to the Future—Forward to the Past

The irony is that this system is not new for Japan. Few people are aware of the fact that free markets were almost the norm in Japan before the war. In the 1920s, the famous postwar Japanese system did not exist. Then, Japan's economy in many ways looked like a carbon copy of today's U.S. economy—with fierce competition, aggressive hiring and firing, takeover battles between large companies, few bureaucratic controls, strong shareholders that demanded high dividends, and corporate funding from the markets, not banks. Yet throughout the postwar era, Japan's economy has been the opposite: highly regulated, with cartels limiting competition, bank financing and cross shareholdings reducing shareholder power, no takeovers, and a frozen labor market with lifetime employment and seniority pay.

The peculiar nature of this postwar economic system has puzzled observers for decades. Leading economic theories indicate that only free markets can

lead to success. But Japan rose within decades from developed-country status to become the second largest economy in the world without relying only on the "invisible hand" of free markets. Many theories have been advanced to explain this enigma.

War Economy

What changed Japan was an event that is often neglected in research on Japan, one that took place between the prewar era and the postwar era: the war itself. The Japanese economic system was created largely during World War II. Its true nature is that of an output-maximizing mobilized war economy.

Japanese corporations have been on a war footing since the early 1940s. In the early postwar era, the United States was keen to demonstrate to the world that post-occupation Japan had been reshaped in its image. In reality, with the beginning of the Cold War, the United States decided to maintain Japan's war footing and keep its wartime bureaucratic elite in power.

While Germany's minister of the war economy, Albert Speer, remained in Spandau Prison as a war criminal, his Japanese wartime colleague became prime minister and, together with his brother, governed Japan for twelve crucial years. During this period, from the late fifties to the early seventies, the wartime bureaucratic elite, still at the control levers, managed to complete the system of the "total economy" that had delivered rapid resource mobilization during the war years. Capable of servicing a far larger market than the restricted domestic economy, it had to expand overseas. The United States, interested in strengthening Japan, allowed this to happen. It was the system of a mobilized war economy that spearheaded Japan's postwar conquest of world markets.

The main reason why the extraordinary nature of Japan's system has remained unknown for so long is the ahistoric and usually counterfactual approach of many current economic theories. History provides the data set for the scientific economist to study. Ignoring history means neglecting the facts.

Big business and politicians also had a role to play in Japan's miracle model, but in the end the economy was controlled not by the triangle of business, politicians, and bureaucrats but by the much narrower triangle of the Ministry of Finance (MoF), the Ministry of International Trade and Industry (MITI), and the Bank of Japan (BoJ). Among these three institutions, the Bank of Japan has had the lowest profile. There was a reason why it was so self-effacing. Although its technical knowledge of the most powerful control tool ensured that in practice the central bank ruled Japan, it was legally subordinate to MoF. Therefore it has always pretended to have very little power. This book tells the story of the true extent of the use and misuse of its power.

Government Intervention Can Create Fast Growth

Economic success and free market economics are virtually synonymous in the eyes of many opinion makers today. This is why developing countries are persuaded to adopt the mantra of the World Bank and the IMF—liberalization, privatization, and deregulation—to achieve economic development. When the Iron Curtain fell and many communist countries adopted market-oriented economic systems, some observerseven argued that the "end of history" had arrived: The struggle between rival economic systems was over, and the free market system had won.

However, Japan did not use free markets to become the second largest economy in the world. This means that there is a rival capitalist economic system, based on the very visible hand of planners, that has outperformed other systems in terms of economic growth rates over a sustained period of time.

The Japanese experience also teaches that government intervention has been misunderstood so far, for it did not take the form of meddling micromanagement, as in a planned economy. Instead, Japan's wartime government officials primarily intervened visibly by conscious institutional design that was aimed at creating the right incentive structures for fast growth. Successful government intervention is about organizational design, not picking winners.[1]

Institutional Design

Influenced by German thinkers, the war economy leaders encouraged the creation of large-scale firms. They realized that among the three stakeholders involved in large companies—management, shareholders, and employees—shareholders' aims were least in line with the planners' overall goal of fast growth. So shareholders were eliminated, managers elevated, and employees motivated through company unions and job security.

Management, freed by cross shareholdings from dividend-oriented shareholders, did not pay out profits but reinvested them. This allowed them to grow their companies and expand market share. It biased Japan's economy toward high growth.

At home, the ensuing cutthroat competition for market share had to be contained by the formation of cartels. This did not mean that competition ended; companies continued to compete to keep up their rankings within the cartel. Most importantly, there were no cartels restricting competition abroad. The world's open doors and free markets meant that Japan's growth machines wreaked havoc. In the 1960s and 1970s, one leading U.S. industry after another was eliminated. Europeans, less dogmatic about free trade, simply restricted

Japanese entry. The Japanese complied—managed trade was what they were used to—and trade friction never became a major issue with Europe.

The High Price of Success

The war economy system was highly successful in achieving its goal of rapid economic growth. But there was a price to pay. Worker benefits were usurped by the small minority employed by the large firms. About two-thirds of all employees still work for small firms, where they never enjoyed the lifetime employment, housing and welfare support, and big expense accounts that large firms offered. A number of mechanisms forced the majority of the workforce to underconsume and save much of their hard-earned income. These included tax incentives, high costs for necessities such as food and education, high and rising land prices, and a patchy pension system.

In the race for a higher ranking in the world, goals such as quality of life and the environment, as well as individual freedom and choice, were judged lower priorities. Living conditions in Japan are still relatively poor—or at least not commensurate with the country's status as the world's number two economic power. Houses are small, commuting in crowded trains often takes two hours or more, and leisure time is limited. Concentration in a few urban areas and conformity even of leisure patterns limit the quality of holidays.

At the same time, the Japanese system delivered great income and wealth equality and hence social cohesion, stability, and peace. Japan's low crime rate is still the envy of the world. Many developing countries would accept such a price for success. The implication for them, as well as for economies changing from a noncapitalist system to a capitalist one, is that they can potentially do much better by adopting the Japanese mobilized economy model than by simply introducing free markets and waiting for the invisible hand to deliver growth. Which economic and social system is preferable—free markets or the mobilized economy—is a political decision. It should be treated as such.

The implication for Japan is that its system is not immutable. It does not go back over two thousand years. The postwar system of the war economy was introduced barely sixty years ago. This proves that Japan is capable of dramatic change. All we need is a crisis—a shock that is large enough to trigger the change.

Hitler's Control Tool

While most of the intervention in Japan's economy took an indirect, market-oriented form, there was a control tool that was used for powerful direct intervention. However, it works in such a subtle way that today many economists would still dispute its presence. The tool is money. The wartime bureaucrats understood what money is, where it comes from, and how it could be used to control every aspect of the economy.

In Europe, the evolution of monetary economics was hampered by the backwardness of its economic system. While the Chinese emperors had already invented paper money and used it to totally control their empire in the tenth century a.D., European rulers still believed that only precious metals could be money. As a result, they were not in charge of the money supply, and hence also not in control of their countries. Gold proved cumbersome to deal with, so it was deposited with goldsmiths, who became the first bankers. A mistaken understanding of their activity led generations of politicians and economists astray as they ignored the far-reaching implications of the fact that banks *create* money and decide who gets it.[2] This also explains why the levers that have been manipulating the Japanese economy remain largely unknown. The war bureaucrats, on the other hand, understood the role of banks and recognized that money is the lifeblood of an economy.

Influenced by the methods of Hitler's central banker, Hjalmar Schacht, the leaders of the Japanese war economy turned credit creation into their most powerful mechanism for total control. They used the banking system purposely and skillfully to allocate resources to targeted industries.

Window Guidance

The credit controls used by the war bureaucrats survived virtually unchanged into the postwar era. They took the form of the extralegal and secretive "window guidance" operated by the Bank of Japan. This "guidance" consisted of direct credit allocation quotas strictly enforced by the central bank. It was at the core of Japan's postwar economic success. It also explains the success of Korea and Taiwan, where the Japanese installed the same during the war, and where the postwar leaders continued to use it.

In the 1950s and 1960s, window guidance controls became instrumental in the emerging struggle for supremacy between the powerful Ministry of Finance and the legally subordinated Bank of Japan. While the ministry won the first political battle and avoided a change in the Bank of Japan Law (which had been introduced in 1942, largely as a translation of Hitler's Reichsbank Law of 1939), the Bank of Japan remained solely in charge of window guidance. It lulled the ministry into a false sense of security by allowing it control over interest rates and downplaying the importance of quantitative credit policies. A string of Bank of Japan studies, supported by conventional neoclassical economics (which at best sees no role for credit policy and at worst simply assumes money does not exist), "proved" that credit controls were ineffective. Thus the Bank of Japan announced that they were abolished. Memories of the powerful nature of the controls faded over the years. By the 1970s, few observers were aware of the fact that while the Finance Ministry might reign, it was the Bank of Japan that ruled.

Test Run: The First Bubble

In the 1970s, the Bank of Japan flexed its credit control muscles to test the limits of its autonomy over running the economy. Using window guidance, it ordered the banks to expand credit to speculative real estate borrowers. As a result, land prices soared and Japan found itself in the midst of the first postwar bubble economy. The recession that inevitably followed shook the established elite, foremost the Ministry of Finance. The role of window guidance credit controls remained little known, so virtually no blame fell on the Bank of Japan.

This experience laid the groundwork for the events of the 1980s and 1990s. It emboldened the central bank to develop its own plans for a new economic, social, and political system for Japan to replace the war economy. The new system was modeled on U.S.-style free markets. The Bank of Japan preferred to move "back to the future" of Japan's free market past, where shareholders were in charge, not other stakeholders, such as employees. Equally importantly, a free market system often leaves the central bank as the uncontested authority over the economy. Of course, to introduce such deep structural changes, the entire war economy system had to be dismantled. That amounted to a revolution. And revolutions happen only in times of crisis.

Buying up the World

From around 1986 until 1990, Japanese money flooded the world. From real estate in New York, Hawaii, and Australia to corporate takeovers in the United States, Europe, and Asia, Japanese money seemed to buy up the planet. The scale of overseas investments was unprecedented and its sheer size left the experts without explanations. Japan was not just using up the dollars it had earned through its sizable exports and trade surpluses; in 1987, Japanese net long-term foreign investment was almost twice as large as the record-high current account surplus. Foreign investment of that scale defied traditional economic models. Japanese money flows remained a mystery. The plot thickened in 1991, when Japan suddenly turned from being the biggest net capital exporter ever to a net importer of capital. What was the cause of these events?

Credit Bubble and Bust

During much of the late 1980s, Japan created too much money, and some of it spilled over abroad. Bank credit creation expanded at a rate of about 15 percent, while national income grew by only about 6 percent. The newly created money was not used productively. It went into speculative purchases of land and stocks. Enormous amounts of new purchasing power pushed asset prices

to dizzying heights. In 1989, the little plot of land surrounding the Imperial Palace in Tokyo had the same market value as the entire state of California. It was a bubble.

In the long run, credit creation that is not used productively cannot be paid back. The excess credit creation beyond the needs of the economy had to turn into bad debts. This is what happened from 1990 onward. Bank loan growth slowed. As asset prices fell, speculators were bankrupted and banks were left holding the bag. About ¥100 trillion worth of loans, a fifth of Japan's GDP, turned into bad debts in the 1990s. Banks were paralyzed and stopped lending. The credit crunch boosted unemployment. The economy moved into the worst recession since the Great Depression.

Who was to blame? Most observers believed the Ministry of Finance was in charge. The ministry also thought so. But all its attempts to create a recovery were to no avail. Despite record low interest rates and unprecedented spending packages, the economy failed to recover. Most observers concluded that the system did not seem to work anymore. The long recession of the 1990s took the shine away from Japan's postwar miracle and destroyed the consensus that had maintained the war economy.

But the system was not the reason why the economy went from boom to bust. Nor could lowering interest rates or fiscal policy help. There was a simple policy that could easily have created a recovery as early as 1993 or 1994. Since banks were not creating enough money, prices were falling, demand shrinking, unemployment rising. The economy simply needed more money. Nothing could have been easier than that—the Bank of Japan could just have switched on the printing presses.

The Battle of the Yen

So just how much money did the Bank of Japan print in the 1990s? Very little. While the Ministry of Finance desperately tried to create a recovery, the Bank of Japan didn't seem in a hurry. Although it lowered interest rates, as ordered by the ministry, it simultaneously reduced the amount of money in circulation. Zero interest rates don't help if the majority of firms (small firms) can't borrow money at any rate. When the ministry increased fiscal spending, the central bank failed to fund it with new money creation. So it was funded by bond issuance to private investors, which merely crowded out private demand. In early 1995, when in desperation the ministry tried to boost exports through a weaker yen and thus ordered record amounts of foreign exchange intervention, the central bank quietly sterilized all intervention. The yen remained strong. In March 1995, the central bank oversterilized and so sent the yen to its postwar high of ¥79.75. This delivered another severe blow to the economy and the ministry.

No doubt, the recession of the 1990s was the result of the central bank's policies. It could fine-tune it through the quantity of credit. An analysis of its actions indicates that it chose to prolong it.

Meanwhile, the central bank launched a frontal assault on the power base of the ministry. For the first time since the 1960s, it reignited a public debate about the Bank of Japan Law and lobbied politicians for its cause. Its goal was to become legally independent. Since the ministry was blamed for the recession, the central bank won the battle. The ministry was defeated and stripped of all key power levers. The central bank is now independent and unaccountable. In Asia, defeated enemies often are at least allowed to save face. No such mercy for the ministry. To add insult to injury, it was stripped of its grand old name. In January 2001 the Ōkurashō ceased to exist.

The Strange Policies of the Central Bankers

Why did the Bank of Japan prolong the recession of the 1990s? A conclusive answer can be found only when another puzzle is solved. The events of the 1990s are rooted in the bubble of the 1980s. How did the bubble, the greatest resource misallocation in peacetime history, come about in the first place? We know that it was due to excessive credit creation by banks. But why did the banks lend so much?

We know that from about 1940 until the end of the 1970s, bank lending was determined by Bank of Japan window guidance. However, according to official statements by the Bank of Japan, these credit controls had been abolished and were not in use during the crucial 1980s. This is the accepted view to date. Is it true? The evidence is that window guidance continued. It is the smoking gun. Who pulled the trigger? What were the motivations of the decision makers? The answer will provide clues to why the Bank of Japan prolonged the recession of the 1990s.

Japan's remarkable story is not without parallel. In the early 1990s, the central banks of Korea, Thailand, and Indonesia embarked on the same policies as the Bank of Japan in the 1980s. Using the extralegal "guidance" of bank lending pioneered by the Reichsbank in Germany, they forced their banks to lend excessively to real estate speculators. The bubble was further inflated by central bank policies to maintain an overvalued fixed exchange rate and higher domestic than foreign interest rates. Speculators were given every incentive to borrow from abroad. Record amounts of U.S. dollars flooded the Asian region, further fuelling the asset bubble and rendering the situation more precarious. In 1997, investors pulled out. Simultaneously, the central banks forced the commercial banks to restrict credit creation. The bubbles burst.

Instead of quickly floating their currencies, the central banks ensured that their substantial foreign exchange reserves were wasted in a futile attempt to

defend the overvalued exchange rates. By late 1997, all three countries were insolvent. As central banks reduced credit creation further, the crisis turned into recession. Why did they all take these same, disastrous policies?

The Second Economic Miracle Ahead

By the 1970s, more voices argued that Japan's wartime system would not deliver high growth anymore. The old system had maximized output by increasing inputs, such as land, labor, capital, and technology. But by the 1970s, Japan was running out of inputs, and hence the potential growth rate was declining. A similar story was told about other Asian countries in the 1990s. One proposed solution was to boost productivity by introducing U.S.-style capitalism.

Almost sixty years after its introduction and extremely successful performance, the Japanese war economy structure was scrapped. The historic deregulation, legal changes, and market-oriented reforms of the 1990s eroded its foundations. Market forces are now pushing ever faster toward the goal of U.S.-style markets. New industries were born of deregulation.

The domestic economy has become more productive and is now able to deliver up to 4 percent noninflationary growth. For an advanced economy such as Japan's, this is nothing short of a second economic miracle. So is all fine and well with Japan and its Asian neighbors? We will know only once we have answered all the puzzling questions.

2 The Total War Economy

The Future Is in the Past

The defeat of 1945 is often regarded as a watershed that heralded the beginning of a new Japan. The dark past was left behind and a fresh start was made with new institutions and economic structures, set up from scratch under the guiding hand of the U.S. occupation. The pictures of burned-down cities, destroyed factories, and ruined bridges sometimes give the impression that a new era started in the ashes of August 1945. The U.S. occupation, officially in charge until 1952—longer than in Germany—implemented the U.S. program of reeducation and democratization of the Japanese people. It provided Japan with a new constitution, political parties, free elections also for women, and a market-oriented capitalist economic system. Mac Arthur's reforms allowed labor unions, broke up the *zaibatsu*, and introduced sweeping land reforms.

Many books and especially popular accounts of Japan therefore start their analysis in 1945, and Japanese history is usually divided into the neat segments of postwar and prewar. Not all scholars look at it this way, as the division into postwar and prewar periods leaves out the most important period in Japanese history this century—wartime.[1] For it is during the war that virtually all of the characteristics of the Japanese social, economic, and even political system of the postwar era, all that we call "typically Japanese," were formed.

Postwar sales drives and inroads into world markets by Japanese companies have often been likened to military campaigns. The employees of Japanese companies call themselves *senshi* (soldiers), and their well-known lifestyle is comparable to that of troops in an army. However, the characterization of Japan's postwar economic system as a war economy is not meant metaphorically; it is literally true. Japan's postwar economy is a fully mobilized war economy, with production shifted from weapons to consumer products.

Guess the Free Market Economy

The reader is asked to guess which country is described by the following facts. It is a country characterized by virtually unmitigated capitalism. The stock

market is the main source of external funding for companies in this country. Shareholders are all-powerful and demand high dividends. This forces management to be oriented toward short-term profits. Most managers are appointed from the outside, not from the ranks of the company. Fierce takeover battles and corporate buyouts keep management on their toes. If they don't perform, they could be out of a job in no time.

The labor market in this country is characterized by hiring and firing and a high rate of job switching by employees. Income and wealth differentials are large. A whole class of rich capitalist families lives off their dividend income. The overall savings rate is low and consumption constitutes the biggest part of GDP—about 80 percent. There are few government regulations, and government officials exert little direct influence over the economy. Indeed, bureaucrats have to do as politicians tell them. There are fierce disputes over policy issues and public interest in politics is high, at times even passionate.

It would be natural to identify the country in question as the present-day United States; the description fits that country fairly well. However, the country referred to is Japan—the Japan of the early 1920s. Many observers believe that the typical, "Japanese-style" economic system has been around since before this century and has its roots in age-old Japanese culture. But scholars have by now established as fact that, to the contrary, the Japanese-style economic system that we know hardly existed in the 1920s.

Japan in the 1920s: Hotbed of Free Market Capitalism

In the 1920s, in many ways Japan was a different country from the one we have known since the postwar era. Its economic system was not pure free market capitalism, but it was much closer to this ideal than it has been ever since.[2] Neither lifetime employment, a seniority-based wage and bonus system, nor company unions were widespread. Firms had few scruples about rapid hiring and firing. Neither did employees have any qualms about quitting to seek greener pastures: Japanese employees changed jobs as much as U.S. employees do now (a figure three times as high as in the Japan of the 1980s). Unions were organized by trade, not by company, thus providing employees with a better voice to call for pay raises—something that became effectively impossible with the company union system of the postwar era. Influential labor unions organized many seriously disruptive strikes in the 1920s, something unheard of in postwar Japan. The unemployment rate was not 2 percent, as during much of the postwar era, but in the double digits.

Firms were not majority-owned by other companies, as in the postwar system of cross shareholding. In the 1920s, there were real capitalists, individuals and families, holding substantial portions of stock. Individual share ownership accounted for the large majority of all shareholdings, while by the

early 1990s it had fallen to less than 15 percent.[3] It was natural that the shareholders would be directly represented on the company board and have their voices heard in the determination of company policy. Before the war, the majority of directors on the boards of large companies were outside appointees, put in place by the shareholders. By contrast, in 1990, over 90 percent of directors on the boards of large firms were internal appointees, raised from the management of the firm.[4]

Back in the 1920s or 1930s, shareholders were powerful because companies obtained between 30 and 50 percent of their external funding from the stock market. In the postwar era, such as the 1960s and 1970s, fund-raising from the stock market accounted for merely 5 to 10 percent of total external fund-raising.[5] The shareholders in the 1920s used their influence to demand high dividends. This required the firms to pay out as much of the profits as possible.[6]

Going for Profits, Not Market Share

In the 1920s and early 1930s, more than two-thirds of profits among leading Japanese companies were paid out as dividends, a sizable 6 percent were paid out as directors' bonuses, and only 25 percent were kept as reserves.[7] By contrast, in the period from 1966 to 1970,43 percent of profits were paid out as dividends, only 2 percent as directors' bonuses, and a massive 55 percent was reinvested.[8] In other words, before the war the distribution of profits was heavily skewed in favor of the capitalist owners. Dividends reflected the fortune of the firm and thus fluctuated with it (unlike the low, virtually fixed dividends of the postwar era).

If management did not implement the owners' orders, they would quickly be sacked and replaced by a new team. This was quite in contrast to postwar Japan, where annual general meetings were rubber-stamp affairs that approved management in a matter of minutes, without discussions or questions being raised (a reason why the *sōkaiya* racketeers could make a living simply by threatening to ask questions at shareholders' meetings).[9] Today's *salarimen* consider the firm "their own," not the property of shareholders, and feel justified to run it as they see fit, without explanations to shareholders.

While in postwar Japan income and wealth were highly equalized, in the 1920s there were significant disparities, with many affluent owners of real estate and stocks who lived off dividends and rents. An important part of this capitalist class were the families that owned the main *zaibatsu* through their control of the holding companies that concentrated shares. But there were others. Only ten of the sixty largest mining and manufacturing firms were related to the *zaibatsu*.[10] The majority of firms were *non-zaibatsu*, and they had diffused share ownership.

The *zaibatsu* firms were keen to expand their influence, however. They aggressively bought up other firms in stock acquisitions and takeovers—a practice unheard of in most of the postwar era. Often rival *zaibatsu* would engage each other in hostile takeover battles. In the 1930s, the Mitsui group bought Meiji Sugar from the Mitsubishi group and two Toyo Sugar factories from the Suzuki group. Oji Paper took over management of Fuji Paper, although it was part of the competing Mitsui *zaibatsu*.

The contrast between prewar and postwar Japan is also reflected in savings rates and the consumption share of GDP. While consumption today makes up less than 60 percent of GDP, in the 1920s it accounted for about 80 percent—as much as in the United States today. Likewise, the percentage of income that is saved, currently running at about 20 percent, was only about 5 percent before the war. Strong consumption sucked in many imports of final consumption goods, which was not the case in the postwar decades.

The reform bureaucrats of the 1930s criticized Japan for looking just like "the stereotyped view of American firms in the present time."[11] Had U.S. trade negotiators been transported from the 1980s to the 1920s, they would not have demanded that Japan change to become more like the United States, for it resembled modern-day U.S.-style capitalism.

The Crisis That Changed Japan

Japanese-style capitalism does not go back to Japan's mystical past and peculiar Asian values. Compared to the well-known postwar version, it barely existed in embryonic form in the prewar era. But when and how was Japan so fundamentally transformed from a fairly free market economy to the highly regulated postwar system? The answer must be found in the event that happened between the prewar and postwar eras: the war itself.

History teaches that no country changes fundamentally without a crisis. The 1930s and early 1940s were such a period. Until the early 1930s the paradigm that had prevailed outside communist countries was that of liberal free market capitalism without much government interference. In Japan there had been a strong tradition of government intervention, but by the early 1920s the arguments of free market capitalism had become influential. There was also considerable external pressure from the United States for Japan to liberalize.[12] However, in the 1930s, the intellectual tide in Japan was changing back to the idea of government intervention, because the free market system did not seem to deliver. The fallout from the New York stock market crash of 1929 was borderless. Worldwide, distressed banks withdrew their loans, bankrupting large proportions of the corporate sector and choking off demand, which led to deflation and large-scale unemployment.[13] This cast doubt on the capitalist paradigm. Quite apparently, free markets, left to their own devices, could also produce major economic disasters.

As economies shrank (13 percent in the United States, 23 percent in the United Kingdom,[14] 12 percent in Germany, and 9.6 percent in Japan),[15] poverty became widespread.[16] The scale of deprivation is hard to imagine today. Starvation and selling of children into prostitution occurred in the United States, Germany, and Japan. A countrywide survey conducted by the military in Japan in the early 1930s found that a high percentage of young men were physically unfit for military service due to malnutrition, disease, and job-induced disabilities. Meanwhile, the capitalist "fat cats" continued to live in style. The Japanese elite saw that both military capability and the workforce would be severely affected if nothing was done.

Not fully comprehending the causes of the Great Depression, more and more thinkers and policymakers concluded that the capitalist system itself was at fault. Sitting idly on one's hands, as free market orthodoxy prescribed, was getting increasingly risky. It was the stuff revolutions were made of. The Bolshevik takeover of 1917, facilitated by dire economic straits and public discontent, was still fresh in everybody's memory.

Internal and External Threats

In Japan, the ruling elite and the bureaucracy became more worried about the possibility of a communist revolution. At the same time, a crisis loomed outside Japan's borders: As the Great Depression spread, countries engaged in competitive devaluation and trade wars to increase demand and income at home. As a result, prices were driven down further, heightening deflation. So more and more countries began to close themselves off from free trade, introducing quotas and tariffs. This was potentially disastrous, for, as a country with hardly any raw material resources, Japan had trade as its lifeblood. If it was not self-sufficient in food, it could survive only if it imported raw materials, processed them, and sold the value-added products abroad.

Japan's economy was crucially dependent on energy imports, mainly of coal and oil. These came largely across the Pacific from the United States. However, the United States had begun to turn protectionist and was fending off Japanese exports. It also increasingly disapproved of Japan's colonial ambitions in Asia.

The Quest for Autarky

Japan ignored U.S. critique. After all, the United Kingdom and the United States had so far been the colonial aggressors in Asia (together with France and Holland). Japan's leaders, especially in the army, had examined closely how Germany was starved of raw material and food imports during the trade blockade of World War I. They concluded that as long as Japan was dependent on imports from the white man, it was not free. With the internal threats of

recession, unemployment, and communist takeover and the external threat of being cut off from world trade, the military concluded that Japan could survive in such a hostile world only if it was strong and free from blackmail. That meant a strong and autarkic economy.[17]

Externally, the military began to implement the dream of "Asia for the Asians." When they advanced beyond Manchuria into China in their quest for autarky, indications that the United States might play the trade boycott card merely confirmed their suspicions, and they accelerated the implementation of their plans.

Internally, they worked on dismantling the system of classical laissez-faire economics, which Japan had tried but found wanting. It was time to try something else. Military thinkers and reform-minded bureaucrats in Japan noticed that economists in Germany were offering a different prescription. Under the Nazi administration their counsel bore fruit. Indeed, to quote British economist Joan Robinson, "Hitler had already found how to cure unemployment before Keynes had finished explaining why it occurred."[18] Moreover, Japanese bureaucrats noticed that one major country had escaped the Great Depression altogether: the Soviet Union. In the 1930s, it embarked on a frantic government-led industrialization drive that was admired in many capitalist countries.

Reform Bureaucrats Pushed for a New System

In Japan, the move away from the free market economy was spearheaded by the military and the "reform bureaucrats" who had entered the ministries during times of high unemployment and had often witnessed starvation in the countryside. They were sympathetic to the critique by Japanese thinkers, such as Kamekichi Takahashi, and German economists, who censured the free market system for allowing rich shareholders to pursue profits while unemployment was endemic.[19] The capitalist shareholders often squeezed firms just to raise their dividends. As funds were drained, firms had little to reinvest. Managers were thus often unable to act in the interest of longer-term profitability and survival. Meanwhile, large-scale stockowners often engaged in speculation, driving up share prices and then dumping the stocks for the capital gain, rendering the stock market little more than a rigged casino.

To the military, the equation was simple: To be strong, Japan's economy needed to grow fast. To increase growth, all resources had to be mobilized, ending the waste of unemployment. The reform bureaucrats also did not want to wait for Adam Smith's "invisible hand." They felt it had to be their quite visible hands that would strengthen Japan's economy. They urged government controls—thus they were often also called "control bureaucrats."

Their desire for controls did not imply micromanagement as in a Sovi-

et-style planned economy. Their ideas were strongly influenced by anticapitalist and especially national socialist thought from Germany, which placed emphasis on government intervention in the form of redesigning the incentive structures.[20] Thus it happened that by the early 1930s Japan had already started to embark on a mobilized war economy. The reformers met resistance on the way, so what we describe as the mobilized war economy was completed only toward the end of the war or even, in many ways, during the early postwar period.[21]

When hostilities with China turned into full-scale war in 1937, the military pushed through major changes under the cover of emergency war legislation, which gave the reform bureaucrats the mandate to establish a mobilized economy with strong government intervention. A new economic, industrial, social, and political structure began to emerge. When the hostilities turned into world war, even stronger legislation was used to completely reshape the Japanese economic, social, and political system. The redesigned institutional setup was to ensure that managers and employees would work toward greater output, not for the sake of short-term profits. It was a transformation that created the postwar Japanese miracle economy.

The Militarization of Japan

In 1936, the Hirota cabinet agreed to put the economy on a quasi-war footing. The first step was to boost the budget for military expenditure. As companies in the munitions sector watched the formation of the 1937 budget, they realized that substantial amounts of raw material imports were required to increase military production. A speculative import boom of raw materials ensued, throwing the balance of payments into sizable deficit. The 1932 foreign exchange control laws were used to restrict imports. They had represented the first set of reforms that would eventually create a controlled war economy.[22]

The 1937 promilitary cabinet of Konoe (the grandfather of 1993 prime minister Hosokawa) promulgated three wartime control laws. The Export-Import Commodities Emergency Measures Law ordered priority allocation of critical materials to the munitions industry. The Emergency Capital Allocation Law controlled the establishment of companies, capital increases, dividend payments, bond flotations, and borrowing of funds. It was used to channel money to the munitions industry according to priority. The Munitions Industrial Mobilization Law furnished bureaucrats with further powers of control.

In April 1938, the sweeping National General Mobilization Law was put to the Diet. It allowed the mobilization of all physical things in the country, and it stated that "the Government may in time of war (including incidents that are to be treated as war) draft Imperial subjects and employ them in mobilization work as stipulated by Imperial Decree whenever necessary." It was pushed

through by Konoe against vigorous resistance from politicians and business leaders, who realized it was a carte blanche—it did not specify the particulars of controls.[23] The principle of a general law that leaves the details to be filled in later by ministerial ordinances gave all authority to the government bureaucracy that could freely wield it as it saw fit. The law gave the government the power to determine prices, establish controls over production, distribution, consumption, movement of goods, and foreign trade and to set up control agencies to implement the decrees.[24]

System for Maximum Production

With such legal powers in their hands and with the approach of Japan's entry into World War II, the Konoe cabinet in 1940 proclaimed the New Economic Order, composed of a New Financial System, a New Fiscal Policy, and a New Labor System. Overall coordination lay in the hands of the Cabinet Planning Board, set up in October 1937. It was designed as the economic general staff of the militarized economy. Its job was to set up a new economic system that would deliver maximum economic growth and to direct resources toward the priority industries.

The aim of the structural transformation was to develop an institutional framework that changed incentives such that everybody would be striving toward the goal of maximum output growth. Economic growth is achieved when some resources are saved and invested. The more is invested, the faster the economy will grow and the greater national income will become. A farmer starting out with nothing but a bag of rice seeds faces the choice between saving and consuming. If he maximizes current consumption, he can have a feast this year, but will starve the next. The more he saves and replants (invests), the greater the crop in the future, as each plant delivers more than one hundred grains of rice. The more he consumes, the less is left for replanting.

Firms are the farmers of the economy. They face the decision whether to save and reinvest their profits or to pay them out to the shareholders as dividends. The smaller the dividends and the more money reinvested, the faster the company will grow. To create an economy that grows rapidly, the institutions of the economy must be shaped such that individuals will save and firms will retain earnings and reinvest.

Separation of Ownership from Control

There are three parties involved in the organization of firms: the owners, the managers, and the employees. In small, family-owned firms, all three roles may be played by the same person. This is what classical and neoclassical economics assumes, for its models consist of many small firms, run and owned by one individual. However, the rise of the large-scale corporation has driven

a wedge between the three functions. Usually, large firms cannot be funded, hence owned, by one individual; they cannot be managed by one individual, and they employ a large number of workers.

So the rise of the large corporation produced a separation of ownership from control and the detachment of employees from the goals of the firms. Each group has different aims and incentives. In a one-man firm, all the incentives of the three different functions coincide and the firm is pulling in the same direction. However, in large firms, as the three groups become separate units, each is striving for what is best from their viewpoint and the firm begins to pull in different directions. The final outcome may not be what produces fastest economic growth. It may also not be what is best for society and the country.

Shareholders Versus Growth

The goal of the shareholders is profit maximization. If they are mainly interested in high dividend payments, companies may be starved of funds to reinvest and hence may grow more slowly. This tends to create surplus funds that a small class of rich owners spend on more trivial pursuits than productive investment. Income inequality rises, speculation and production of wasteful goods increases. Economic growth slows. For the super-rich, consumption is a small percentage of their total income and wealth.[25] With high income and wealth inequality, consumption will be weaker than in an economy with an egalitarian distribution.

If employees are not motivated to work hard, and if they squeeze higher wages and shorter working hours out of firms, it will also dampen profits and—if an economy-wide phenomenon—lower overall economic growth. So the reform bureaucrats concluded that giving too much power to either shareholders or employees was bad for growth.

They found the story different for managers. Managers receive not only higher pay but also greater prestige and power over corporate resources (including expense budgets) if they move up the hierarchy. Since the hierarchy is pyramid-shaped, with fewer people at the top, more at the bottom, more managers will be able to rise up the ranks if the firm grows. So the pursuit of their own goals leads managers to strive for faster growth of the firm. While the aims of shareholders and workers are not directly in line with fast overall economic growth, the goals of the managers are.[26]

Capitalism Without Capitalists

The New Economic System aimed at setting the firm "free from control of stockholders pursuing profit making."[27] Disempowering shareholders and workers while empowering managers would boost growth, the war planners

concluded in the 1930s. The managers of large-scale firms were their allies, shareholders and unruly unionized workers their enemy.[28] Workers, though, could be won over if treated the right way. To curb worker discontent and communist agitators, employees had to identify closely with the firm—for instance, by having a greater say in company matters and through indoctrination with an ideology of the "firm as family."

However, shareholders would be difficult to reconcile with the overall goal of fast growth. Among the three interest groups, they were least crucial for growth. The reformers concluded that in a modern economy dominated by large-scale corporations, capitalism would work better without capitalists, and instead with powerful managers.

Managerial Capitalism and the Firm as Family

Given such analysis, the reformers had their work cut out for them. Managers were elevated. This came naturally, since in large-scale organizations they are essentially private-sector bureaucrats. Modern bureaucracy is modeled on the Prussian bureaucracy, which in turn was designed on the basis of the Prussian army. Naturally, the military looked at managers as private-sector soldiers, and as controls strengthened, they were fully integrated into the military chain of command. In the end it extended down to the worker, who was a corporate soldier.

The doctrine of the firm as an "organic organization" binding employers and employees together and serving for the public benefit was officially implemented in 1938, with the establishment of Industrial Patriotic Societies in all companies. Joint meetings with management and employees were organized where workers could raise their concerns and participate in management decisions. At the same time, trade unions were abolished and all union activity channeled to the company level. This ensured that concessions to workers would not become too large to endanger fast growth of the firm.

Meanwhile, the role of stockholders was cut down to size. The New Labor System proclaimed in 1940 that the firm was not the property of the shareholders, but a communal organization composed of those who worked there. Army Ministry bureaucrats argued, "It is necessary to transform stocks to interest-bearing securities, and the character of stockholders to recipients of such interest.... In management it is essential to consider first and foremost the people who work for the firm. In one way or another, management, technology and labor all depend on the overall manipulation of people. This aspect of management is invariably more important than capital itself."[29] New laws set limits on dividend growth. Beginning in April 1939, firms with dividend rates of 10 percent or more—about two-thirds of large firms at the time—required a permit from the Ministry of Finance to increase their dividend rate.

This made stock investments less attractive. Moreover, since the assassination of Mitsui chief Dan Takuma, the *zaibatsu* families had increasingly been selling their shares to the public. This was not only in response to pressure from the military and bureaucrats, but also to mitigate the *anti-zaibatsu* feelings among the public.

It was soon found that if firms within a group issued shares and simply swapped them among each other, the influence of outside stockholders could be reduced without diluting group ties. Thus cross shareholdings rose in the 1930s, among the *zaibatsu* firms reaching as high as 40 percent of all outstanding stock during wartime.[30] This increased the independence of managers, as the new shareholders were other managers with the same growth orientation.

The New Labor System: Creation of Japan as We Know It

Yet by 1943, the control bureaucrats and military felt that profit orientation of firms was still dominant and growth orientation insufficient. They found that managers were still afraid of shareholders. Although dividends had been reduced, shareholders could still threaten managers during general meetings. Thus as part of the 1943 Measures to Strengthen the Domestic System, the corporate law was changed and a new Munitions Corporation Law was promulgated in October of that year. It eliminated shareholders' influence on firm management. Instead, the authorities designated one manager as the responsible person for production in every firm. He was given the power to run the firm as he saw fit to achieve the twin goals of quantity and quality. He could not be sacked by stockholders and was dispensed from the necessity to obtain stockholder permission for his actions.[31] He was only to be held accountable by the planning bureaucrats for the fulfillment of quantitative production objectives. The planners' powers were also strengthened, when in November 1943 the Cabinet Planning Board was united with the Ministry of Commerce and Industry to form the powerful Munitions Ministry.[32]

In March 1944, the annual share dividend was decreased to 5 percent. Any residual influence by shareholders over profit allocation, fund-raising matters, and the appointment of managers was eliminated. They had been reduced to fixed-income investors without a vote. The bulk of profits were divided among reinvestment, salaries for managers and employees, and special bonuses for workers to reward specific productivity improvements.[33]

Since managers had been given great powers, they had to be prevented from boosting their own bonuses too much. So managers and employees received salaries according to the number of years they had served in the firm—seniority pay. Promotion was to be decided on relative merit. If a firm grew fast, the less able manager could be promoted also. In return, employees and

managers had to vow loyalty to the firm. They were effectively prevented from quitting, because other firms, organized on the same principles of seniority and lifetime employment, would not hire them.

Welfare schemes for managers and employees were introduced that were the most advanced in Asia. The National Health Insurance Law of 1938 and the Personnel Health Insurance Law of 1939 provided virtually complete health coverage to employees. The 1942 Workmen's Annuity and Insurance Law for the first time required the payment of annuities in case of old age, disability, or death. In 1944 it was broadened to include other personnel and women.[34]

Creation of the Main Bank System

Large-scale firms were the bureaucrats' friends. So several "national policy firms" were set up, which evolved into giant conglomerates. Most of them were stock companies, but the majority of the stocks were held by the government and shareholder influence was limited. The government chose the top managers, and bureaucrats oversaw company policy. The number of these firms jumped from 27 in 1937 to 154 in June 1941.[35] In 1944, key producers of military supplies were designated as "munitions companies." In 1945, over six hundred firms received necessary funds to fulfill their production quota via one or two banks that had been allocated to them by the Ministry of Finance.[36] This main bank was the designated "Financial Institution Authorized to Finance Munitions Companies," ordered to ensure a steady flow of bank loans to the firm as it required—a compulsory lending system. The "main bank" relationships lasted until today.

Banks were compensated against losses for risky lending, either through the government loan guarantee program or by being bailed out by the government if they got into trouble. In March 1945, the system was further expanded. Soon more than two thousand firms, including many companies not involved with munitions, had each been assigned a bank charged with tending to their financing needs. The allocation of bank credit thus shifted drastically from other sectors to priority manufacturing.[37]And bank credit accounted for almost 100 percent of corporate fund-raising by the end of the war. Funding through the stock market had ceased.

The Origin of Japan's High Savings Rate

As more and more purchasing power was given to the military producers who then made claims on the limited resources, fewer goods and services were available for private consumption. If consumers were to spend as much as they had in the 1920s, they would compete with the military and bid up prices. Inflation would be the result, and that would threaten labor disputes

and worker unrest, as it did in 1937 and earlier. The solution was to get the population to withhold their purchasing power by saving. This would prevent inflation.

The first step was to encourage voluntary savings. In April 1938, a National Savings Promotion Campaign was launched that aimed at boosting the savings rate to 30 percent of GNP. Savings Promotion Committees and cooperatives mushroomed throughout government offices and private firms and among ordinary workers and neighborhoods throughout the country. An agency for the promotion of savings was established at the Bank of Japan (where it is still in operation today). Most of the savings took the form of deposits with the postal savings system or with banks. The result was underconsumption and a transfer of purchasing power from the household sector to the corporate sector.

Creation of the Trade and Business Associations

In the New Economic Order the visible hands of the mobilization planners directed resources from the top down by formulating quantitative output targets, which were then divided into the various industries and passed on to the control organizations that had been created in each industry. They exist until this day as the ubiquitous industry or trade associations. Thanks to the associations, the bureaucrats could delegate the task of implementation and monitoring of their orders to the private sector. It was the control associations, not bureaucrats, that divided overall quotas into orders for individual firms and ensured compliance. Human resources were allocated similarly, achieving a historic transfer of labor from agriculture and nonpriority firms to munitions companies.

To organize industry more efficiently, firms and factories were amalgamated into fewer, larger units that could enjoy economies of scale. The economic structure became highly concentrated. At the same time, the large firms found it efficient to subcontract production of certain components to smaller firms, who were dependent on them—virtual external subsidiaries.

The New Japan

The changes implemented between 1937 and 1945 reshaped the function of the firm. Under the slogan "Public interest above individual interest," the New Economic Order successfully transformed firms from private profit-seeking undertakings to quasi-public ones focusing on growth, not profits. The market mechanism of the prewar period was substituted by a system of planning and government guidance that used private property and rank competition as an incentive device. Import penetration was successfully reduced.[38] Resources had been shifted from nonessential industries to the heavy machinery and

manufacturing industries crucial for munitions. Textiles halved from 29.3 percent of total production in 1937 to 14.7 percent in 1941, while the machinery production share more than doubled from 14.4 percent to 30.2 percent.[39] Private-sector savings rose from only 9.1 percent in the 1920s to 54.8 percent of GNP from 1941 to 1944.[40] Real GDP grew by 25 percent during the war years (from 1940 to 1944).[41] Munitions production grew 197 percent between 1941 and 1944.[42] Labor was fully mobilized and shifted from agriculture to industry in a transformation that irreversibly rendered Japan an industrialized nation.[43] Unemployment had been eliminated. The planners of the war economy achieved the goal of maximizing output from the available resources.

Introduction of One-Party Rule

On the political front, the military and reform bureaucrats felt that a system had to be created that would keep meddling politicians at bay. For this purpose, political parties were simply abolished and all politicians united in a one-party system, as pioneered by the Soviet Union. The single party was called the Imperial Rule Assistance Association. The police force was reorganized in an attempt to increase surveillance of individuals. A system of neighborhood police checkpoints was developed, which put up police microstations in virtually every corner of the country and enlisted senior citizens in each neighborhood as police informers (the system is intact today). Japan also became the most advanced social welfare state in Asia. Schooling was transformed, agriculture revamped. The changes were long lasting.[44]

Japan's System: An Economy at War

By the time Japan surrendered in 1945, most key features of the postwar economic structure had been established and Japan had been transformed from the free market capitalism of the 1920s to the controlled, "Japanese-style" capitalism of the postwar era. The labor structure among large firms changed to low job mobility and high loyalty to the firm, lifetime employment, seniority system, company unions, and bonus pay. The corporate organization clearly separated ownership from control, allowed few outside board directors, left shareholders weak, and thus made low dividends and a growth orientation possible. A "dual" structure was created, characterized by a few large firms with many small subcontractors linked in business groups. Funding shifted to borrowing from banks. The role of the bureaucracy became more interventionist and "administrative guidance" was crucial. Politicians did not make policies, and their influence was kept in check by the one-party system. The war mobilization changed what previously was a largely agrarian society into an industrial workforce trained to serve according to military work schedules.

The sudden emergence of the war economy system in the short time from 1937 to 1945 should surprise economists and historians. First, the system itself is surprisingly consistent, logically coherent, and highly efficient. Taking one individual component alone, it would not work. Implemented in its entirety, as happened in the postwar era, it beat the free market system of other countries hands down and created the postwar Japanese "economic miracle."

How could the wartime planners so quickly design such a consistent and efficient system? They had gained invaluable experience in implementing and running this system when they were experimenting with its prototype in Manchuria, which had been under direct army rule since 1931. The same bureaucrats then moved back to Japan to implement it there. The Manchurian planners did not have to invent it from scratch, either; they took most of their ideas from European thinkers and economists, with the biggest input coming from Germany.[45]

Winning the Peace

An Economy at War

The Cold War Propaganda Myth of the Postwar Reforms

If Japan's postwar economic, social, and even political system was created during the war, then what were the U.S. occupation and the postwar reforms all about? General MacArthur's Occupation Administration was given orders to democratize, deconcentrate, demilitarize, and liberalize Japan. To implement this goal, first the wartime laws and ordinances, such as the National General Mobilization Law, were abolished and the control associations and other wartime organizations dissolved. The military and their bureaucracies were disbanded. The Munitions Ministry, at the heart of the war economy, was broken up in December 1945. So was the powerful Home Ministry, with its police apparatus, including the dreaded Thought Police. War criminals were brought to trial.

Second, the political system was reshaped. Japan was given a new constitution, which established democratic principles and the freedom of speech and religion. Female suffrage and free elections were introduced. Third, MacArthur's GHQ implemented three major reforms designed to dismantle the war economy system: the breakup of the *zaibatsu*, land reform, and labor democratization.

Thanks to these high-profile reforms, it seemed that Japan made a break with the past and was about to become a free, democratic, and liberal capitalist country, partner of the United States, the leader of the "free world." This, at least, is how Cold War propaganda on both sides of the Pacific presented it.

At first glance it looks as if the U.S. occupation fulfilled its official goal. But when the occupation ended in April 1952, its fruits were quite different from those it had promised. Instead of dismantling the war economy system and deregulating and liberalizing the economy, the opposite had happened. The U.S. occupation succeeded in strengthening and further entrenching the fully mobilized war economy system.

With the advent of the Cold War, some lobbyists in the United States were

more interested in establishing Japan as a "bulwark against Communism" and hence urged that Japan's economy be strengthened as quickly as possible.[1] "Japan hands" in the State Department, such as prewar ambassador Joseph Grew, succeeded in pushing for far milder occupation policies than were implemented in Germany.[2] Ultimately, interests in New York and Washington came to the same conclusion as the wartime economic planners did in the 1930s: that the visible hand of the government should be used to accelerate growth.[3] Already by 1947, General MacArthur's democratization policies had been seriously undermined. Although there was no official announcement, a major U-turn of the U.S. stance vis-à-vis Japan had taken place. The GHQ now actively advanced the continuation and strengthening of the successful war system of total resource mobilization.

Reform by Relabeling

As a result, for all intents and purposes Japan's wartime economic controls remained unchanged even after the end of World War II. The Munitions Ministry merely split into the Ministry of International Trade and Industry (MITI) and the Economic Planning Agency (noticeably less menacing labels).[4] The wartime control associations soon resurfaced as private-sector business associations of the various trades and industrial sectors. The postwar carmakers' lobby, the Japan Automobiles Manufacturers Association, for instance, was the automobile control association during the war. The *keidanren*, the powerful umbrella organization of all sectoral associations, is the successor to the wartime center of economic control associations. A random check into the history of many postwar companies and associations, not to mention laws, rules and customs, inevitably unearths wartime roots—whether it is the Tokyo Eidan Subway Corporation, the Japan Productivity Center, the Bankers' Association, the Association for the Promotion of Savings, or the neighborhood police reporting system.[5]

Certain wartime legislation was officially reintroduced soon after the war, especially by MITI and MoF: the Order No. 3 of the occupation forces of September 1945 declared the continuation of economic controls. Foreign currency rationing was reintroduced immediately. A materials supply and demand plan was drawn up in place of the materials mobilization plan.[6]

The continuation of the war system was most blatant when it came to the monetary system and financial controls: the wartime Temporary Funds Adjustment Law of 1937 and the Ordinance on Funds Operation of Banks of 1940 remained effective. So did the Bank of Japan Law of 1942 (it was changed fundamentally only in April 1998). The Foreign Exchange and Foreign Trade Control Law, promulgated in 1949, was merely a continuation of the laws that started with the Capital Flight Prevention Law of 1932, the first series of laws that established the controlled war economy. It lasted until April 1998.

The close relationships between companies and banks that were set up during the war also reestablished themselves when the U.S. occupation ended, in the form of the powerful *keiretsu* and the main bank system. Even key parts of the postwar tax system can be traced to the war economy. The Enterprise Rationalization Promotion Law of 1952 established a depreciation system for important machinery with very high rates of depreciation and hence large tax incentives to accelerate capital investment. This furthered the corporate bias of overinvestment and underconsumption. Its origin is to be found in the Price Compensation System of 1943.

Supreme Rule of the War Economy Bureaucrats

It was not only the institutions of the wartime system that survived intact with only minor name changes. More importantly, there was virtually complete continuity of wartime bureaucrats and managers. While the troops were disbanded, the leaders and war planners who had run the war economy remained in their positions.[7]

General MacArthur had decided to implement systematically the principle of indirect rule through the Japanese bureaucracy, unlike the more direct rule established by the occupation forces in Germany. This left the bureaucracy practically completely in place. If anything, the power of the economic bureaucracy that had pushed for the war economy system increased after the war. Thanks to the U.S. occupation, their principal rivals for power, the military and the Home Ministry, had been disbanded. Another, somewhat lesser rival, the once proud Foreign Ministry, had also greatly diminished, as Japan's foreign policy was mostly made in Washington, not Tokyo. As long as they could agree with the goals of MacArthur, the economic bureaucrats at MoF, MITI, the predecessor of the Economic Planning Agency, and the Bank of Japan had become the rulers of Japan.

Even though with the abolition of the National General Mobilization Law their powers were now "informal," this did not diminish them in practice. The principal source of bureaucratic power, the licensing system, was still in place and terminology merely changed from "control," "planning," and "allocation" to "guidance" and "moral suasion." Since their private-sector counterparts were also largely the same people they had been working with during the war, strict obedience was assured. "Japan was placed under an American system of rule, but the ideological pattern remained exactly as hitherto."[8]

The Return of the Manchurians

The very bureaucrats and managers who had demonstrated excellence in running the fully mobilized war economy, whether in Manchuria or back home, received rapid promotions to even more elevated positions in the postwar

system. This is not surprising, since of the economic war planners, hardly any were purged by the United States—forty-two Ministry of Munitions, nine MoF bureaucrats and basically no Bank of Japan officials.[9] And as soon as the U.S. occupation left, practically all the nonmilitary men who had been purged were rehabilitated in order to fill the ranks that their seniority deserved. This includes wartime politicians and most Home Ministry bureaucrats who had been in charge of the Thought Police. A number moved into the Education Ministry to take care of postwar education policy in Japan.[10]

The wartime planners did not just move back to modest positions in the public arena. The suspected Class A war criminals took center stage in the 1960s and early 1970s in positions as high as Japan's prime ministership.[11] The most important postwar economic and political leaders came from the elite group of wartime bureaucrats, the "Manchurians."

While Albert Speer, the German wartime economy minister, was incarcerated in Berlin's Spandau Prison, his Japanese wartime colleague, Nobosuke Kishi, became prime minister. Kishi had been the leading Manchurian control bureaucrat, and during the war he became the minister for munitions, heading the war economy. As such, he had been a key designer of the wartime economic system.[12] He was also the nephew of Yosuke Matsuoka, a general director of the South Manchurian Railway Company—the core of the Manchurian mobilized war economy and one of the largest companies in the world at the time. Matsuoka was a staunch backer of the army and the Manchurian experiment, and later rose to become pro-German foreign minister of the second Konoe Cabinet (from July 1940 to July 1941).

Kishi and his brother, Eisako Sato (a former railway bureaucrat), were prime ministers for altogether ten years, between 1957 until 1972.[13] Other prime ministers with experience of the wartime system include Yasuhiro Nakasone, a former Home Ministry official. A key figure later in this book, the governor of the Bank of Japan in the 1990s, Yasushi Mieno, was born in Manchuria, since his father was a top control bureaucrat in the Manchurian Railway, the cadre school of the wartime economy. Finally, one should not forget the emperor himself, who was also an active leader during the war and a willing collaborator afterward.[14]

Among the eleven major automobile manufacturers of postwar Japan, only Honda is a true postwar creation. Toyota, Nissan, and Isuzu were key producers of trucks for the military. The seven other carmakers switched to car production from aircraft, tank, and warship manufacturing. Nissan and Hitachi were the core of the conglomerate operated by Yoshisuke Ayukawa, a supporter of the Manchurian experiment of the controlled economy. He moved the headquarters of his conglomerate, including Nissan, to Manchuria, where he named it the Mangyo (Manchurian Industries) concern. Ayuka-

wa became a member of parliament after the war.

Even the postwar media scene is the result of wartime concentration legacy: The Nikkei and the Sankei Shinbun are basically the result of wartime mergers, as are many other firms. Dentsu, Japan's top advertising company, is the product of the wartime concentration of the advertising industry, which reduced the number of firms from almost two hundred to only twelve. "It recruited so many former military and Manchukuo bureaucrats that in the early postwar era it was often called the 'Second Manchurian Railway Building.'"[15] Manchurian origins can also be found with many large publishing companies. The list of successful or important postwar companies, institutions, and individuals with Manchurian or war economy backgrounds is a long one.[16]

LDP—"Bureaucratic Rule Assistance Association"

The minor role of political parties in forming serious economic policies in postwar Japan is well known. It remains to say that the unification of several parties to create the so-called Liberal Democratic Party in 1955 established the one-party reign (if not rule) that provided the democratic fig leaf for the control bureaucrats who were actually running the country. The so-called 1955 system closely resembled the one-party Imperial Rule Assistance Association system of the war era.[17] The minor, and clever, improvement was that an opposition was allowed to provide an outlet for dissenters and to show the world that Japan was, really, a democracy.[18] For forty years, until 1993, all governments were constituted solely by the LDP.

With a Little Help from My U.S. Friends

Michio Morishima, a seasoned expert on Japan's economy, concluded: "As a result of this shift [in U.S. policy], Japanese capitalism re-emerged like a phoenix in a form almost identical to that of the prewar period."[19] More than that: The irony is that only during the postwar era did the reform bureaucrats succeed in implementing their boldest reforms. During the war, they had failed to implement their ideas in two important areas. One was the complete elimination of the capitalist class from public and business life—the purge of the powerful *zaibatsu* families. The control bureaucrats considered this necessary to ensure continued growth orientation and the permanent neglect of profit maximization.[20] The other was full-scale land reform that would expropriate large-scale landowners and redistribute land to boost wealth equality. This was expected to raise productivity and living standards in the agricultural sector. Despite their far-reaching powers, the reformers had faced stiff resistance during the war, as both policies smacked of communism. It was therefore anathema to the more capitalistically inclined leaders of the wartime peri-

od. Although the economic planners had to shelve these radical ideas, they remained convinced that they were necessary to enhance Japan's growth potential.

They did not have to wait very long. General MacArthur volunteered to implement these socialist policies, employing all the force of an occupation power. He purged the capitalist class, the *zaibatsu* families (the official reason was that they had allegedly been instrumental in setting up the militarist regime). They had mainly controlled their *zaibatsu* firms through holding companies, which owned the majority of *zaibatsu* firm stock. In 1946, holding companies held 167 million shares of stock. Since the total number of shares in all companies in the country was 443 million, they owned almost 40 percent of the total.[21] The *zaibatsu* owners were forced to sell their stocks to the public, and the holding companies were forbidden entirely (until 1998). *Zaibatsu* leaders, including illustrious members of the founding families—the core of the capitalist elite in Japan—were purged as war criminals or supporters of a criminal war and prohibited from further business activity. An Anti-Monopoly Law and a Law for the Elimination of Excessive Concentration of Economic Power were enacted in 1947.

While the capitalist families disappeared from the economic landscape, their large conglomerates remained. Of the 325 firms scheduled for dismantling in 1948, only 18 were actually split up. By 1953, just a year after the departure of the U.S. occupation, the Anti-Monopoly Law had already been drastically watered down. Restrictions on stock retention, interlocking directorships, and mergers were relaxed, depression and rationalization cartels allowed. In the 1950s and 1960s about 30 laws were passed that provided exemptions to many industries from the Anti-Monopoly Law as well as the Export-Import Law. These included the Insurance Industry Law, the Aviation Industry Law, the Securities Investment Trust Law, the Fruit Industry Promotion Special Mearures Law, and so forth. Thanks to such vigorous intervention, the number of official cartels swelled from 162 in 1955 to 1,079 in 1966—as we shall see, an important part of the war economy system.[22] Most of all, the originally planned breakup of the five largest banks was abandoned, leaving the financial system entirely unchanged from its wartime setup.

Meanwhile, the companies regrouped as *keiretsu* business groups. While they were not held together by centralized holding companies, the companies simply tied themselves together by issuing more shares and swapping them, that is, by rapidly expanding the cross shareholdings. The war bureaucrats preferred this to holding companies, because the latter could be influenced by shareholders, but diffuse cross shareholdings established their system of capitalism without capitalists. Thanks to MacArthur's anti-*zaibatsu* reform, Japan's corporate giants had been rendered even more independent from shareholder influence and unaccountable to outsiders. Although banks could

only hold up to 5 percent of stock of any industrial corporation, and since 1953 up to 10 percent, by arranging the purchase of stock by related keiretsu firms—each buying a small percentage of stock from each other's firm—they could cumulatively control over two-thirds of all shares. The resulting bank-centered business groups were identical to the prewar conglomerates, only they were now controlled by managers, not the capitalist shareholders. And in this managerial capitalism it was only the banks and ultimately the bureaucrats who had the say and could allocate resources as they saw fit.

Expropriation of Capitalists

The U.S. occupation also helped the wartime bureaucrats in implementing another one of their key goals. During the war, they had made attempts at sweeping land reforms. Politically unable to expropriate the large-scale owners during the war, the bureaucrats had instead opted for rendering them de facto irrelevant, just like the shareholders. By having a government agency buy rice at a high price directly from the farmer while paying landowners low rents for their land, they had severed the tie between tenant and owner and, crucially, between owner and land. Like shareholders, landowners had become receivers of a fixed income without actual say over their property. However, a full-blown reallocation of landowner-ship had remained impossible during the war.

The U.S. occupation did the job for them by reallocating landownership to the tenant farmers. The postwar land reform almost completely wiped out the pre-1945 landlord class. This reallocation of land property went so smoothly only because the preparation had already taken place during the war. As a result, a major step toward social equality was achieved. The U.S. occupation initially pushed for the democratization of the labor market, introducing new labor legislation and a nationwide labor union movement. Accordingly, the share of unionized labor rose from zero in 1945 to almost 60 percent in 1949. The increasingly powerful communist influence over this movement, with the background of the Cold War, convinced the U.S. occupation to change course. In July 1948 it restricted the right to form trade-based unions and abolished the right of civil servants to engage in strikes. From then on, the wartime company labor unions, the Industrial Patriotic Associations, were revived and mushroomed all over the country. After this, all the other wartime labor practices, from lifetime employment to bonus payments, were reinforced. This ensured that real strikes declined sharply, because workers would only hurt their firm, and hence themselves. The health insurance system introduced during the war essentially laid the foundation for the postwar Japanese social security system.

Kamikaze Capitalism: The Fight for Market Share

Thanks to the efforts of the U.S. occupation, the system of a fully mobilized war economy was led to completion in the postwar years—almost. Only in one aspect was the wartime economic model not yet complete, despite the tacit support from the United States. Indeed, there is a snag in the model that became visible during peacetime. Since the structure of the firm is designed such that the goal is growth, not profits, managers will compete for market share. Although concentration was greatly increased in every industry in order to rationalize production and take advantage of economies of scale, the planners always made sure that enough firms would remain to compete against each other to prevent managers from resting on their laurels. Since there are no trade unions any more, the company tie is more important than the fate shared with fellow employees in other firms. Steel workers thus compete with each other instead of uniting. The management of one firm battles the management of another. Being in a firm with higher rank brought more prestige and had material benefits of higher incomes, pension plans, and more company facilities for housing, health care, and recreation.

In wartime, there was no problem with this, because firms focused on the production of their allocated quota with the simultaneous goal of highest quality. But in peacetime, bureaucrats soon found that their structure was getting too successful: When these market-share-oriented firms were let loose against each other without production quotas, fierce competition for market share would ensue. Like competition for ranking among managers in the hierarchy, the result of the war system was that entire firms would compete not for profits but for ranking—the corporate pecking order decided by market share.

Since market share was the goal, firms would competitively lower prices; cutthroat competition and a dumping war would ensue until no firm was making any profits. In U.S.-style capitalism, the profit motive is the goal. Market shares are only a means to the ultimate end of higher profits. When competing against another firm, the profit motive would limit competition. As margins of both competitors approach zero, firms would stop lowering prices. They would be satisfied with profits and would be happy to coexist with each other. Not Japan's corporate warriors. Since the whole corporate structure was not aimed at profit maximization, low profitability, even losses, failed to stop the combatants from continuing their ruthless battle.

War Model Too Successful for Its Own Good

This was the inevitable result of an institutional setup where competition takes place between parallel groups of the same kind, as the "enemy" is so

similar.[23] It is also a major strength of the collectivist ranking competition on which the war economy is based: Society is divided into homogeneous groups, all ranked, and competition exists between those in the same category for ranking.[24] "The pursuit of maximum growth has serious industrial and macroeconomic consequences," notes an observer of the phenomenon.[25] The war-mobilized model was so successful in inducing growth and market-share expansion that firms would not stop. This phenomenon was soon recognized by the bureaucracy and called "excess competition" (*katō kyōsō*)—competition beyond what is necessary and good for the firms. Firms would go deeply into the red and even borrow to subsidize their output. It was a war of one management against another. Profits were no consideration. Firms would fight until bankruptcy to gain market share. There was no truce. The war system produced economic war until one side was destroyed.

During the postwar era, however, firms were not given predetermined production quotas. Left to their own devices, the structure would produce many bankruptcies, higher unemployment, and excessively high concentration in each sector. Once the bureaucrats had identified the problem, a solution could be worked out. The solution was the creation of explicit or implicit cartels, usually administered by the trade associations (the former wartime control associations). A ranking of firms was established, and the guidance of the industry association ensured that firms would by and large leave the ranking unaltered; all the firms continued to compete, but just enough to keep the rankings intact.

Cartels Were Necessary

To many observers, cartels may appear to be a bad thing. However, the cartels and industry associations fulfilled a crucial function.[26] Without them, excess competition would lead to economically wasteful excess production and dumping of goods below their production value. At the same time, the cartels and industry associations served the purpose of implementing the bureaucratic "guidance." The problem was that the Anti-Monopoly Law had rendered cartels and agreements illegal in many sectors, such as construction. If they had been made public, they would also have drawn criticism from abroad. Thus the bureaucrats tacitly tolerated illegal collusion to fix prices and market shares, the so-called *dango*, such as in the construction and public works sectors. Given Japan's economic system, they served the public interest, for collusion was aimed not at profits, but at maintaining market-share rankings, while firms continued to compete for price and quality.

Despite the cartels and industry associations, however, the competition between firms remained so fierce that "excessive competition" was the biggest weakness of the mobilized economy set-up. Until the 1990s, it seemed to

be the problem that Japanese firms produced too much, invested too much, competed too much, and grew too much.[27]

The Mobilized Postwar Economy

The militarization embraced people's daily lives: Western-style trousers had replaced the kimono during the war, and rationed food and consumption had standardized consumption patterns. The thought that consumption was bad and savings good had been hammered deeply into the psyche. What previously was an agricultural and traditional craftsmen's workforce had now concentrated in big cities and was employed in factories: "They put on industrial overalls and learned the life of bondage to the factory whistle."[28] All this thanks to the war.

The wartime shift of labor to the heavy manufacturing sector and the shift of production capacity away from light industry, especially textiles, which dominated the prewar economy, laid the foundations for the rapid industrialization of heavy and chemical industries in the postwar era.[29] The increase of technical schools from less than a dozen in the early 1930s to more than four hundred in 1945 was due to the science and engineering requirements of the military, which exempted these fields from military service. By the end of the war the number of engineering students had tripled compared with a decade earlier.[30] Quality control had been a major concern of the military, which rigorously enforced norms and standards set by the Industrial Standardization Law of 1940.

The relationships forged during the war between banks and companies, large firms and their small suppliers, and bureaucrats and the industry associations provided the framework for postwar success. In the 1960s, more than 40 percent of the parts suppliers to Toyota had begun this relationship as wartime subcontractors.[31]

War technology was transferred to manufacturing consumer goods. Engineers and workers trained in this technology put their knowledge to making consumer goods. There are cases of machine-gun factories switching to sewing machine production. Optical weapons factories became exporters of cameras and binoculars. Suppliers of military hardware, such as tanks, trucks, planes, and ships, became the postwar shipping, automobile and heavy industries giants. Upstart firms created and championed by the military during the war became postwar world leaders in their sector.

Exports, Not Bullets

The wartime ideology of the firm as family, fostered by the Industrial Patriotic Associations, was carried over unaltered to the postwar era.[32] Lives remained regimented, with company exercises in the morning, military boot camps for

new company employees, and army-style discipline and obedience to superiors. The ultimate goal of a soldier had also been transferred to the postwar corporate warriors—loyalty unto death, as documented by the stunning phenomenon of *karōshi* (death from overwork).[33]

Consumers and households were encouraged to withhold their purchasing power by saving, while firms were given funds to invest in the priority sectors. Their products had to be sold. In the early postwar years, the expansion of domestic demand was important for growth, based on enfranchised farmers and workers.[34] By the early 1960s it became apparent that, given the high domestic savings, the markets had to be overseas. So instead of munitions, the priority industries were now export-oriented manufacturers.

Managers were the commanding officers, workers and *salarimen* the corporate soldiers. The bureaucracies of MoF, MITI, and the Bank of Japan were the economic general staff. All fought the total economic war against the world.

Exports were the bullets flying out, hitting world markets and often leaving deep wounds in other countries in the form of high unemployment. Imports were hits taken and had to be minimized. This was done with the wartime exchange rationing system, revived immediately after the war. Importers required import licenses for each item, which were granted only to producers in priority industries, such as the export industry. This system was used to impose extreme restrictions on automobile imports, tantamount to total import ban, while the infant domestic car industry was getting into gear. The more bullets were fired and the fewer hits taken, the likelier Japan was going to win the economic war it was fighting. A trade surplus meant victory. It seemed Japan was following the oft-quoted caricature of mercantilism, where trade surpluses had become an end, not a means to an end.

But the World Was Unprotected

The result could not fail to be even more successful than the war economy. Economically speaking, weapons are wasteful production, because they are consumed. The same factories now produced similarly high-value-added export goods, which now, however, earned foreign currency. The money could then be used to import other production factors, such as raw materials, or for reinvestment. Thus instead of a steady drain on the system, as weapons production had been, exports would continuously strengthen Japan. The only limit would be the willingness of the world to put up with a country that was still at war with the world in economic terms—closed to imports and hence piling up trade surpluses as if they were war loot.

While domestically the bureaucrats and industry association leaders ensured that companies would be protected against the kamikaze-like market share expansion behavior, the rest of the world was not so lucky. The only

place where the full thrust of Japan's totally mobilized growth-oriented economy was working unmitigated and without restraining cartels was the world market.

As the United States pushed the Western countries to welcome Japanese exports, the full force of Japan's war economy was unleashed onto the world. Ignoring profits and aiming at market share, Japanese exports soon dominated the steel and shipbuilding markets in the 1960s. European and U.S. firms, aiming at profitability, were soon driven out of business. The onslaught by Japanese carmakers followed. Subsidized by the underconsumption of the domestic population, they began to conquer world markets.[35] Then, in the 1970s and 1980s, the entire U.S. consumer electronics industry was wiped out by Japan's militarized and mobilized exporters. As a consequence, unemployment rose in the United States and Europe.

U.S. economists were often puzzled by the fact that Japanese monopolization of many markets in the world did not lead to concerted price rises to exploit monopoly profits. Analysts still failed to see its intrinsically different organizational structure and dynamics as a scale-maximization machine. Profits were irrelevant for management.

Ensuring Access to World Markets

Before Japan could make these historic inroads into world markets, however, it had to ensure that the world would be open to its products. The major clubs of the postwar industrialized world community, the GATT (now WTO), and the OECD, guaranteed open markets for all its member countries. That is why Japan had been pushing for membership since the 1950s. There was only one catch: The membership rules said that only countries with market-oriented and open economic systems could join.

This provision was aimed at protecting the members from countries that might dump their products while keeping their own markets closed—countries just like Japan. European countries argued that Japan's application to join GATT should be refused until the country had deregulated its economy and opened its markets to the world. However, the Cold War was raging. Japan being America's key ally in the Pacific, the Americans put politics before economic considerations. Against the express wish of European countries (France objected particularly strongly), the United States used its dominant position to push through Japan's application.[36]

In response to GATT membership, Tokyo strengthened its tariff barriers—just in case these foreigners thought they could now export to Japan.[37]

The Japanese bureaucrats realized, however, that Japan would not be allowed to maintain its exemptions forever. Moreover, they longed for an even greater prize, namely, membership in the prestigious OECD, the club of "advanced" countries. And it was already clear that the United States would not

allow quite as many exemptions from membership rules. There was one rule that Japanese leaders knew would ultimately have to be adhered to: free flows of money and free foreign investment among member countries.

At the time, much of the world had fixed exchange rates with the U.S. dollar under the Bretton Woods system (until 1971). This forced other countries to accept the U.S. dollar at given exchange rates. Japanese bureaucrats watched with horror as the United States took great advantage of the system by simply printing large amounts of dollars. The U.S. Federal Reserve had embarked on a major domestic credit expansion drive, and much of that excess money was used to buy up European corporations.[38]

Government-Organized Deception

The war bureaucrats scrambled back to their drawing boards to find a solution. Business leaders of all industries held meetings in their various industry associations. Everyone was keen to keep the world open to Japanese exports. But all were very much afraid of an influx of foreign capital that could take over corporate Japan and change the wartime system. Foreign investment was a threat to the war bureaucrats and business leaders. Japan needed to "defend" itself against forced takeovers from abroad.[39] So what to do?

It was time for a great act of deception. What followed was, in the inconspicuous words of MITI, "a series of measures as a part of [the government's] effort to prepare for the liberalization of capital transactions to strengthen business and industrial structures in order to make them competitive with foreign firms."[40]

To take over a Japanese company, foreigners would have to buy shares on the stock market. So the bureaucrats used a weapon of their war economy arsenal: they had already successfully reduced the influence of the *zaibatsu* families and other individual shareowners by the system of cross-shareholdings. More of the same was needed to keep the foreigners out.

Assume there are two firms that have issued one hundred listed shares in the hands of a *zaibatsu* family. If both issue two hundred more shares each and swap them, the ownership and hence control of the original owner is drastically reduced; instead of owning the entire firm, the one hundred shares now entitle the *zaibatsu* family to only a third of the firm. Since the managers of both firms agreed beforehand not to sell each other's shares and also not to use the ownership to interfere in each other's businesses, it is nothing but a managers' mutiny to expropriate the original owners and take over the firm.

Companies Choose Their Shareholders

That, of course, was precisely what the wartime planners had wanted. The same would also work for foreigners, the bureaucrats thought. The only obsta-

cle—a mere detail—was that expropriating shareholders was now theft. And theft was illegal, even in Japan's postwar mobilized economy. Article 280 of the Commercial Law protected shareholders from dilution of their ownership without their consent given at a general meeting of shareholders. During the war, such niceties could be dispensed with by invoking the National General Mobilization Law. As the world was to find out, the postwar power of bureaucrats was hardly any smaller now. Article 280 of the Commercial Law was simply rewritten. In 1955, just in time for GATT membership in September of that year, the Diet revised and amended Paragraph 2 of Article 280. "The new provision allowed the board of a company to issue additional shares and assign them to each other—that is, they dilute the present stock of shares without obtaining formal approval from the current stockholders."[41]

Thanks to the exemptions to the GATT rules, there was no immediate need by companies to invoke this new clause of the Commercial Law. The law change therefore drew little public attention in Japan, let alone the rest of the world. Careful not to cause any headlines, companies slowly but surely issued new stock and swapped it with their business partners, such as subcontractors, and their banks.

The process accelerated in the early 1960s, as Japan received clearer hints by its allies that it would be allowed to join the OECD soon, provided it deregulated international capital flows. At the time, American capital outflows had increased even further and U.S. companies were just about buying up the free world with their printed money. France, Germany, and Britain received large inflows of foreign investment. This takeover by U.S. capitalism of European companies in the late 1950s and early 1960s came to be dubbed "*le défi Americain*" by a French contemporary. In this situation the United States did not want their European allies to get any ideas about protecting themselves from U.S. foreign investment. Any exemption for Japan from the capital flow clause of the OECD membership rules was therefore going to be temporary.

"Japan could no longer use any reason to impose import restrictions and invisible trade regulations for balance-of-payment reasons, and instead became obliged to promote liberalization of capital transactions," to borrow the words of MITI strategists.[42] Japan still succeeded in obtaining eighteen exemptions to the OECD membership rules.[43] Moreover, companies stepped up their new issuance of stocks and swapped them with each other.[44] Though billed as a measure to "raise capital," no new money was raised.

Instead, management had built up an invincible defense against takeovers and outsiders trying to influence their policy. Now let the foreigners come. Japan was open to their investment. They would find nothing to buy. Japan Inc. was simply not up for sale. Most shares were not traded, but held in stable interlocking relationships. Most large firms participated in the scheme, thus increasing their *keiretsu* ties. The degree of cross shareholdings between firms

thus increased rapidly again in the 1960s. While in 1949 about 70 percent of all shares were held by individual owners, by the late 1980s this had dropped to a mere 19.9 percent of all shares traded on the Tokyo Stock Exchange.[45] The lack of dominant individual holdings makes it harder for the dispersed individuals to assert their rights and influence management.

By 1966, the program to boost stable cross shareholdings was virtually completed. To prevent the possibility of criticism from abroad, the bureaucrats and business leaders decided to modify Article 280 to give the appearance of propriety. A large number of small provisions were added that gave details of the circumstances under which management boards could issue new shares without shareholder approval. And thus it came that the world never took notice of Japan's act of deception.

In the words of Paul Krugman: "Japan's situation with regard to direct investment is like its situation with regard to imports, only more so. *De jure*, Japan is wide open ... de facto, foreign firms in Japan face endless informal obstacles."[46] In 1988, Japanese companies acquired 315 firms abroad. Foreigners, however, bought only 11 firms in Japan.[47] Even when foreigners managed to obtain large stakes, such as T. Boone Pickens, who acquired more than 30 percent of the shares of Koito, a parts supplier within the Toyota *keiretsu*, this did not guarantee influence on management. Pickens failed to gain representation on the board of the company in which he held a "controlling" stake and felt forced to sell out. The extremely low amounts of direct investment by the world into Japan has been an important reason why foreign firms have found it hard, if not impossible to penetrate the Japanese market. In Japan it was not shareholders that chose which company's shares to buy, but companies that chose their shareholders. Foreigners were not favored.

Japan as Perpetual War Economy

Thanks to this maneuver, by the early 1970s the war economy had been more firmly established than ever since bureaucrats and the military set out to mobilize it in 1937. Japan's bureaucracy had managed to realize its wartime dream of a management entirely free from the profit-oriented interests of individual ownership. The wartime vision of managers not aiming at profits, but their own goals, had become entrenched reality. And managers' aims are advanced best when the firm grows—growth for the glory of the nation. A mobilized war economy had been established, a nation run by public and private bureaucrat-soldiers in the fight for economic supremacy.

Perceptive observers, especially within Japan or in Europe, pointed out the important role of strong government intervention.[48] While the Cold War lasted, U.S. opinion leaders did not allow such critique to come to bear. But it was clever intervention. Bureaucrats had also learned during the war not to

pick winners but to treat worthy competitors equally. As long as companies met certain standards of rationalization, they would receive equal government assistance. Targeted competition was always used to give firms and their employees maximum incentives to work hard. When subsidies were decided for an industry, firms had to compete against each other to obtain them. Bureaucrats employed conscious organizational design to shape incentive structures toward the desired outcome.

The Emperor's New Clothes

Their clocks gave it away, but nobody noticed: The Japanese did not set them back to zero in 1945. The official Japanese calendar counts years by the rule of the emperor. After 1945, the Showa emperor, Hirohito, took off his military uniform, in which until then he had been seen in public for most of his reign. He was given new clothes. But he remained in office. And the clocks just ticked on. Nineteen forty-five was far from zero hour. It was not even half-time of the official calendar, the Showa era, which ended only in 1989, sixty-four years after Hirohito began his reign. Modern Japan can be understood much better when the entire Showa era is considered. The ascendance of the Showa emperor in the 1920s is where we must start if we want to trace the true origins of the postwar Japanese economic, social, and political system.[49]

The Alchemy of Banking

Money

Conscious institutional design by the war economy bureaucrats created the structures for a growth-oriented economy. The designers likened their system to an "organism" that worked like a body. Structures alone, however, are like a body without blood. What is missing in our description is the lifeblood of an economy, the liquid that is oiling the wheels of commerce: money.

Since humans abandoned barter several thousand years ago, money has been at the center of economic activity. It is therefore not surprising to find that money, its creation and allocation, also took center stage in Japan's war economy.

Just What Is Money?

Unlike the leaders of Japan's war economy, many economists today dispute the crucial role of money. It may surprise many readers, but it is probably fair to say that many economists do not know what money is.[1] Things were easy when only gold and silver were used as money. But in a modern financial system it is not so obvious how to measure money. Most economists define money as the sum of central bank cash and bank deposits. However, it is not clear whether only short-term, long-term, other types, or all types of bank deposits should be included in such a measure. That is why central banks now publish a whole menu of so-called money supply measures—deposit aggregates ranging from the narrow MO (cash in circulation and bank deposits with the central bank) to M4 or wider aggregates (including all types of deposits).

Despite the multitude of measures, none of them seems to be particularly useful, because none of the M-aggregates has a stable link with economic growth.[2] This is a headache. One of the few things most economists agree on is that money supply growth and economic growth should move closely together. But in the 1980s, money supply measures in many countries expanded much faster than GDP growth.[3] By the mid-1980s, both the Bank of

England and the U.S. Federal Reserve had announced that they had lost faith in the M1, M2, or M3 type of money-supply measures and were abandoning monetary targets altogether. Since then it has become quiet around monetary theories.

Big Interest in Rates

Today, most economists have no interest in the role of money in the economy. The latest macroeconomic theories argue that money is "neutral"—just a veil over the tangible economy. Economic research, these economists advise, can therefore safely ignore money.[4] The big mysteries in economics—why we still have business cycles, stock market booms and busts, large-scale unemployment, and crises—are said to have nothing to do with money.

Though ignoring the quantity of money, mainstream modern economics pays close attention to its price—the rate of interest. The question whether the U.S. Federal Reserve will raise interest rates or not galvanizes experts and millions of investors. Unlike the quantity of money, interest rates can be accurately measured, and the latest data are available frequently. Many economists also believe that interest rates indirectly tell us about money. If interest rates are low, they say, there will be more money, and if they are high, the money supply must be shrinking.

Money Mattered to War Bureaucrats

While today such neoclassical economics is most widespread, in the 1930s the similar theories of classical economics were taught at leading U.K. and U.S. universities. The conclusions were the same. The war economy bureaucrats studied the classical theories. But they could not explain events very well. Links between money supply and growth were weak (such as in the United States in the 1920s). There was also no unique connection between interest rates and the quantity of money. Sometimes interest rates were low, but the quantity of money could be low as well. Worst of all, sharp reductions in interest rates, such as in the 1930s in the United States, did not seem to stimulate the economy (while for a long time in the 1920s rising interest rates did not seem to slow the U.S. economy).

When the world was in the grip of the Great Depression, classical economists argued that lowering interest rates would be enough. No government intervention was necessary, as the free markets would stimulate the economy on their own. But the invisible hand seemed to create more and more unemployment and starvation in the United States, where the recession lasted almost a decade. The reform bureaucrats instead turned to the anticlassical theories developed by German economists. They offered a different explanation of how the economy works. Much of their insights were drawn from a

detailed study of history, which they believed offered important clues to an understanding of the economy—and the role of money.

The Power of Money

Going back in history, we find the oldest advanced monetary system in China. It lasted for several hundred years, until the era of Mongolian rule. It is at this time that a detailed description was delivered to Europe in the form of Marco Polo's report of his twenty years spent in Kublai Khan's China in the late thirteenth century. Marco Polo was a trained merchant, and his book *The Travels* is full of information and insights concerning the Chinese economy. He did not fail to give an account of the most advanced monetary system at the time.

The world's first paper money was launched in the tenth century in China by the ruling Sung Dynasty. In this advanced monetary system, there was no doubt about what money was: the paper money issued by the emperor and stamped by his seal. He was the central bank. No other institution was allowed to create money, on penalty of death.[5]

The emperor was directly in control of the money supply. This meant that he could stimulate demand by creating more paper money, or cool the economy by taking paper out of circulation. He also determined who could gain control over food, raw material, weapons, and the latest technology, by creating and allocating paper money at will. He was an absolute ruler in every sense, in control of all the resources of his empire.[6] Marco Polo vividly describes this advanced monetary system, which had been in place when he visited China under the rule of Kublai Khan:

> It is in this city of Khan-balik that the Great Khan has his mint; and it is so organized that you might well say that he has mastered the art of alchemy. I will demonstrate this to you here and now. You must know that he has money made for him by the following process, out of the bark of trees—to be precise, from mulberry trees (the same whose leaves furnish food for silkworms). The fine bast between the bark and the wood of the tree is stripped off. Then it is crumbled and pounded and flattened out with the aid of glue into sheets like sheets of cotton paper, which are all black. When made, they are cut up into rectangles of various sizes, longer than they are broad.... And all these papers are sealed with the seal of the Great Khan. The procedure of issue is as formal and as authoritative as if they were made of pure gold or silver. On each piece of money several specially appointed officials write other names, each setting his own stamp. When it is completed in due form, the chief of the officials deputed by the Khan dips in cinnabar the seal or bull assigned to him and stamps it on the top of the piece of money so that the shape of the seal in vermilion remains impressed upon it. And then the money is authentic. And if anyone were to forge it, he would suffer the extreme penalty.

> Of this money the Khan has such a quantity made that with it he could buy all the treasure in the world. With this currency he orders all payments to be made throughout every province and kingdom and region of his empire. And no one dares refuse it on pain of losing his life. And I assure you that all the peoples and populations who are subject to his rule are perfectly willing to accept these papers in payment, since wherever they go they pay in the same currency, whether for goods or for pearls or precious stones or gold or silver. With these pieces of paper they can buy anything and pay for anything.[7]

Marco Polo also describes what today we would call open market operations conducted by the Great Khan through purchases of gold, silver, precious metals, or other supplies from his subjects:

> Several times a year parties of traders arrive with pearls and precious stones and gold and silver and other valuables, such as cloth of gold and silk, and surrender them all to the Great Khan. The Khan then summons twelve experts, who are chosen for the task and have special knowledge of it, and bids them examine the wares that the traders have brought and pay for them what they judge to be their true value. The twelve experts duly examine the wares and pay the value in the paper currency of which I have spoken. The traders accept it willingly, because they can spend it afterwards on the various goods they buy throughout the Great Khan's dominions....
>
> Let me tell you further that several times a year a fiat goes forth through the towns that all those who have gems and pearls and gold and silver must bring them to the Great Khan's mint. This they do, and in such abundance that it is past all reckoning; and they are all paid in paper money. By this means the Great Khan acquires all the gold and silver and pearls and precious stones of all his territories.[8]... And all the Khan's armies are paid with this sort of money.
>
> I have now told you how it comes about that the Great Khan must have, as indeed he has, more treasure than anyone else in the world. I may go further and affirm that all the world's great potentates put together have not such riches as belong to the Great Khan alone.[9]

Marco Polo's description seemed wildly exaggerated to his fellow Europeans. We now know, however, that he was giving what amounts to an accurate description of the monetary system prevailing at this time in the Mongolian Empire. Even his estimation of the Khan's wealth as far exceeding that of his counterparts in the rest of the world might well have been accurate.

At the time, European kings and princes could only dream of such wealth or such power over the economy and their dominions. Things had developed quite differently for them in Europe. The rulers there failed to understand the true nature of money. To them, only gold or other precious metals could be

money. But if gold is the main currency, it is impossible for a ruler to control the money supply. Gold cannot be created at will. Rulers tried, though in vain. Thanks to their efforts, chemistry got an early start in the form of the doomed attempts at creating gold through alchemy.

Compared to their colleagues in China, European rulers could not really be considered fully in charge. They could not control the resources in their countries. Kings had to compete with their own subjects for resources. A government that does not control the money supply has hardly any influence over its economy. Such a government is not sovereign. The great Kublai Khan, emperor of China and the Mongolian Empire, would probably have shaken his head in disbelief if he had known that European rulers could not issue money to implement public-sector projects. Instead, European governments had to rely on taxes. Often tax levels were already close to the pain threshold, and money was still needed for government investments or expenditures. If the kings and princes still wanted to build roads, hospitals, and castles or raise an army to defend their country, more often than not they had to borrow money. No matter how absolutist or all-powerful they may have called themselves, when it came to money most European rulers had to ask for help.

The Goldsmiths' Alchemy

So who was in control in Europe? It seemed that whoever had accumulated a lot of gold would be able to stake the biggest claim on resources. In reality things were a little subtler. Although precious metals were the main means of payment, it turned out that they were too heavy and too cumbersome, and it was too dangerous to transport them each time when going shopping for larger items. Gold wasn't even safe at home. Soon the richer merchants and landowners started to look for safe places to store their gold and silver. Who better to entrust one's gold to than the goldsmiths, whose job was to work with gold and jewels and who therefore had safe storage places? They were well established and independently rich, so there was little risk that they would make off with anyone's gold.

When gold was deposited with a goldsmith, he would write a receipt to certify that it was in his custody. Depositors found this convenient: Why bother taking out the gold for each purchase when the new owner of the gold would deposit the gold back with the goldsmith again anyway? Since the goldsmith was well known, soon the deposit receipts themselves were accepted in lieu of payment. The deposit receipts had become money.

By about the thirteenth century, paper money therefore also had its debut in Europe. However, it was crucially different in its form, function, and implications from China's paper money. It was issued not by the government but by a private group of businessmen.[10]

The Biggest Trick in History

Most crafts in medieval times were organized in trade guilds. So were the goldsmiths. At their regular meetings they must have discussed the phenomenon of a lot of gold lying idly in their vaults as many depositors used the receipts as money. They probably realized fairly quickly that they could make extra profits if they lent out the gold in the meantime. The risk of getting caught without gold was low if they helped each other in case of unexpected withdrawals.

The moment the goldsmiths lent out some of the deposited gold to earn extra interest, two things happened. First, the goldsmiths committed fraud. Their deposit receipts guaranteed that the gold was deposited with them. Their customers relied on the fact that the gold was there. But it was gone, lent out. So the goldsmiths strove to keep this from the public. As long as the public did not know or did not understand, there was no problem.

Second, new purchasing power was created. While the receipts for the gold were used to purchase goods in the economy, the gold itself, when lent out, provided someone else with additional purchasing power that had not previously existed. The total amount of purchasing power in the economy increased. The goldsmiths had expanded the money supply. But unlike in China, where the government made the decision over creation and allocation of purchasing power, in Europe it was the goldsmiths who could dictate who would receive money. Though unknown to the public, the goldsmiths' actions affected everyone. As they created more money, the number of claims on scarce resources increased.

Things became even better for the goldsmiths. They found that demand for loans remained steady. When they had already lent out most of their gold, they were unwilling to let the opportunity slip to earn more interest. So they figured that they could further expand their lending by giving their borrowers deposit receipts instead of gold. Put simply, the goldsmiths could "print" money! By doing so, they could provide purchasing power to whomever they liked. This time, three things happened: First, the number of claims on resources, the money supply, increased further. This created a larger potential for economic booms or inflation of consumer or asset prices. Second, the fraud reached significant proportions, as they issued fictitious deposit receipts far in excess of the gold left in their vaults. This created even larger profits — borrowers would pay back in real money what the goldsmiths had not owned. It also created a larger potential for crises when depositors would demand their money back. Third, banking was born.

Penniless Monarchs in the Bankers' Kingdom

The goldsmiths soon gave up working with gold and jewels. They had hit on

a far easier and far more lucrative business. They charged interest for issuing paper slips that cost them nothing to produce! They became wealthier and henceforth would be known as bankers.

The bankers had managed to do what kings, emperors, and alchemists had failed to do—they were creating money. They had found the philosopher's stone.[11] They were the central bank of their time.

This had fundamental implications that were to change the course of history, for it meant that the allocation of new purchasing power was not under the control of the government. Europe's monarchs did not see through the deception. They naively believed that the bankers had large amounts of gold. When governments needed money and could not raise taxes further, they too thought they had to borrow from the bankers.

The irony was that the bankers were just doing what the kings could have done themselves: issue paper money. Yet because the monarchs came to rely on their bankers to fund large ventures, ultimately the bankers gained great influence over national policies. Soon it became doubtful who was really in charge of the country. The Old Testament says that the borrower is servant to the lender.[12] Thus it came that the kings often had become servants. Bankers were the masters who created and allocated purchasing power.

The bankers, of course, had their own interests to look after. Greatest opportunities beckoned when a monarch spent a lot of money—and hence created national debt. Some princes were wise and failed to borrow. Then the bankers had to wait for helpful circumstances such as wars between princes. Wars are a prime cause of borrowing and national debt. In times of war even the thriftiest prince would be in need of money. Was it surprising if, in exchange for their invaluable services, bankers would ask not only for interest payments but also for special privileges, rights, titles, and lands? If the monarch was recalcitrant, his war fortunes could suddenly falter. Those bankers would do particularly well who had connections to colleagues in other countries, including to bankers on the other side of the front lines, who funded the ruler of the enemy country. Then the temptation must on occasion have arisen to collude with the enemy's bankers, because such "rational" behavior would maximize their joint benefit. Together, they could then decide which king was going to win—the one who had granted them the greatest privileges. They could simply issue more money to their favorite and, with deepest regrets, report to the other that they had run out of cash. If the latter didn't believe them that there was no more money he could simply be shown their empty vaults. After his defeat the spoils could then be divided. Too bad for all those soldiers who had died in the process.[13]

While Kublai Kahn and his predecessors were absolutely in control of their country through their control of the money supply, in Europe it was the reverse: The rulers came to be controlled by money and by those who were in charge of its issuance. Not the kings, but their financiers were in charge.

Money Is Credit

Until the advent of central banks (in the United States as recent as 1913), private banks therefore printed and issued paper money when someone took out a loan. The English language bears witness to this process, as even today, paper money slips are referred to as "bank notes." At the time it was still clear how money should be measured: It was the sum of gold circulating and all the paper money issued by the banks.

On the surface things seemed to change when central banks were introduced. These institutions, usually founded and owned by the most influential bankers, had received the monopoly rights to print paper money.[14] Thus all other banks became dependent on them. This did not mean, though, that the banks stopped creating money. Bank money creation merely took a less visible form. If someone wanted to borrow from a bank, the bank could open an account and create a new deposit entry.[15] This is "book" money, or bank money. It worked as well as gold or paper money. So even today, private banks create most of the money supply. Currently, in most countries less than 10 percent of the money supply is paper money issued by the central bank. As in the days of an advanced goldsmith credit economy, banks today create and allocate the vast majority of purchasing power in the economy.[16]

The classical economists thought that the way to measure this bank money creation was to count all bank deposits. This is probably due to the fact that the old bank notes were called deposit receipts. But on a net basis, the banks issued new deposit receipts only when they granted new loans. Modern M-type deposit aggregates do not measure circulating money. They measure savings. The modern equivalent of the deposit receipt issuance by banks is not the accumulation of bank deposits but the extension of loans. Bank credit measures the money that is actually circulating.[17]

Seeing Trees, Not the Forest

Another reason why classical and modern neoclassical theories do not usually recognize the role of banks may be their focus on microeconomics, and the static nature of the theories. Thus economists often would only analyze one single bank, or one deposit or loan transaction. Combine this with the usual textbook treatment of the credit creation in a fractional-reserve banking system, and the true money creation power of banks is obscured. This is why in most finance or money and banking textbooks, banks are today described as financial intermediaries that merely accept deposits with one hand and extend these as loans with the other. Banks are just like the stock market or other financial intermediaries, these textbooks say: institutions that transfer money from savers to investors.[18]

Banks' power of credit creation should not be played down, but explained in a way that makes this enormous power obvious—such as by pointing out that a bank does not just hand out a deposit to others as a loan once—but more than ten times. If you deposit $1,000 with a bank, and if the central bank requires banks to hold reserves of 1 percent, it is tempting to assume that the bank will lend out $990 and keep $10 (1 percent of $1,000) as reserves (as most textbooks also describe it). This is not what happens. Based on your $1,000 in new deposits, the first bank can already lend $99,000 (and keep your $1,000, which is 1 percent of $100,000 as reserves). How is this possible? Where does the bank get the extra $99,000 from?

The truth is, banks don't have money. They simply create it by granting "credit" to someone. This does not cost them anything, as loans are *created* out of nothing. In the 1930s, this credit creation process took the form of a manual entry into the bank's loan book ledger. Today it is but an entry into the bank's computer. The more loans banks give out, the more deposits will be written into existence. If one bank gets more deposits than another, the excess deposits are passed along to the other banks that have a shortage (through the interbank market).

The Life Cycle of Money

The life cycle of money begins when money is born by the extension of bank loans. It does its job while circulating as purchasing power in the economy. The more credit a bank creates, the more purchasing power is exerted in the economy and used for transactions that otherwise would not take place. When the borrower spends the money, the receiver is likely to deposit it again with a bank. This is when money is "retired" from circulation. By drawing it from a deposit account, it can be mobilized again. Newly created purchasing power is eliminated again from circulation—money "dies," so to speak—when the loans are paid back.

The power to create money makes banks special, and quite different from stock or bond markets, which can only reallocate already existing purchasing power.[19] It also makes them more fragile. Austrian school economists remain convinced that banking is founded on fraud: the banks' promise that the money is deposited with them is not kept—nor could it be kept should everyone insist upon it.[20] That is why the bankers wanted to have a central bank, to step in and print cash when necessary.

Credit Is Supply-Determined

A correct measure of the "money supply" is simply the sum of central bank credit creation (injected as a result of the net buying and selling of assets by the central bank) and private bank credit. Credit aggregates therefore have a

far better correlation with economic activity than the M-measures of deposits that are emphasized in central bank publications.[21] They also easily beat the information value of interest rates.

The trouble with interest rates is that they are not uniquely related to the quantity of credit. They can't be, because banks keep interest rates artificially low, in order to ration the credit market, and select among potential loan applicants those they prefer. In rationed markets, not the price, but the quantity determines the outcome. Interest rates can be low, and credit growth very fast. But credit growth can also be slow. That depends entirely on the banks' decisions.[22]

This means that the entire industry of interest rate watchers and analysts could spend their time more fruitfully in other ways. When interest rates go up, it is not clear that the economy will slow. Likewise, declining interest rates are no indication that the economy will accelerate. Economic growth is determined by the quantity of credit, not its price.

There is No "Capital Shortage"

Without an understanding of the credit creation process, economic theories also had to get other concepts wrong, such as the role of savings and the determinants of growth. Classical economics assumed that there is a given amount of savings, which pose a limit for loan extension and hence investment. In reality savings are not limited at any moment in time. They are not a constraint on loans or investment. If more money is required for investment, banks can simply create it.[23]

Occasionally economists worry about a "savings shortage" or "capital shortage," which they feel is holding back growth. There is no such thing. Savings do not impose a limit on economic growth. If necessary, banks can create more money, and hence create more deposits, which are savings. This will surely raise nominal spending and investment and hence nominal growth.[24]

The crucial question is, of course, whether the newly created credit is used for productive purposes or not. If new money is used unproductively, it is going to drive up prices. If it is used productively, it will not result in inflation. This is easy to achieve when economic resources are idle and there is unemployment. So especially during recessions, it is easy to ensure that new credit is used productively. Hence new money creation will result in a recovery, not inflation.[25]

The facts about money are simple. Yet they are not well known. Introductory textbooks of economics briefly mention that banks create money. But all the theories that follow ignore this fact. It took many centuries for Europeans to rediscover the truths that had been known in China as early as the tenth century and recognize that money was intrinsically based on the laws of the

state and hence could be usefully employed by the government for economic development. Many European economists did discover the truth about money and banks in the eighteenth and nineteenth centuries, such as John Law in Scotland and France, and Adam Mueller and Georg Knapp in Germany.[26] However, all their theories were soon superseded and are now forgotten.

It was fortunate for the bankers that a group of economists existed, the classical and neoclassical economists, who could be relied upon to argue that money—and hence banks—did not matter. In the battle for ideas the old and new classical economists had either the better arguments or the better funding. In any case, their theories became widespread and dominate the economics profession today.[27]

Credit: Key Tool for a Controlled Economy

Some wartime thinkers and reform bureaucrats followed a different creed of economics. They studied their German economists well and thus came to understand the truth about money and banks. They realized that the power of banks and the central bank to create and allocate credit rendered them key levers to control the economy and allocate resources.[28] Like the Chinese emperors, they wanted to control money, in order to gain control over the country.

The institutional design of the war economy system created the framework within which resources could be allocated to produce economic growth. But it was the monetary system that was used for the actual implementation of resource allocation and output creation. It is money that holds the key to understanding Japan's success since it embarked on economic warfare in the 1930s.

Credit

The Economic High Command

Shifting from the Stock Market to Bank Funding

The paramount goal of the reform bureaucrats was to maximize economic growth—which would also maximize war production. By definition, growth is due to investment. And to invest, firms need money. External fund-raising can take the form either of bank borrowing or of issuance of debt and equity—borrowing from the securities markets. In the 1920s and early 1930s, Japanese firms mainly obtained external funding from the stock market. Similar to the United States today, between 1934 and 1936 bank borrowing in Japan accounted for an average of 18 percent of firms' liabilities, with equity finance responsible for 81 percent. However, less than ten years later, firms had switched the source of funding radically toward bank borrowing. In the period from 1940 to 1950, on average 60 percent of firms' liabilities consisted of bank borrowing and only 40 percent consisted of equity financing. The predominance of bank financing persisted until the late 1980s: In 1965, 89 percent of banks' liabilities were bank borrowings; in 1970, 85 percent; and in 1980, 87 percent.[1]

Again, the change of a major feature of the economic system—the switch from market funding to bank funding—did not happen by coincidence or due to market forces. The visible hand of the government purposely placed bank lending at the center of the war economy. Government officials saw many advantages in bank funding and hence suppressed funding from the stock or bond markets. Instead they used bank credit as the main tool to allocate resources within the war economy system.

Bankers Have a Heart for Managers

One reason why the war economy bureaucrats preferred bank funding was that they strove to empower managers over shareholders. Equity finance would have put shareholders in charge, and that might have directed the

economy toward profits, not quantitative expansion. Bank borrowing eliminated this threat.

Instead of shareholders, company management was now monitored by their bankers, who had to ensure that their loans were not wasted. But the bankers were managers themselves. The separation of ownership and control, which was engineered by the control bureaucrats, also included banks. This meant that from the late 1930s onward, individual shareholder influence over banks had been minimized. Also, the bankers were less interested in profits than in growth. Instead of charging high interest rates, they therefore wanted to boost their lending. That would be possible only if companies grew fast and hence had a further need for borrowing. Thanks to bank financing, corporate managers had found a natural ally in their bankers.

Another reason was speed. In a state of war, priority industries must raise large amounts of money quickly. Bank financing beats market financing when it comes to speed and ease of fund-raising. All that is necessary for a firm to obtain funds from a bank is the decision by the loan officer, who can make the money available at the stroke of a pen. Equity financing or even debt issuance involves many more steps and participants, from lawyers drawing up the deals to underwriting and placement in the market. This can take months of preparation and execution. War planners could not afford such a leisurely pace.

Banks Boost Savings

Providing money to key industries is only one side of the tasks authorities faced during the war effort, however. As priority industries increasingly obtained purchasing power and laid claim to the available—and limited—national output, prices would be driven up if consumption demand was not at the same time reduced. Continued strong private consumption would pit firms against consumers in the competition for scarce resources. To avoid inflation and the social instability that could follow, authorities had to ensure that consumers increasingly withheld their purchasing power. Individuals needed to be encouraged to save.

In a stock-market-based financial system, savers would have to be encouraged to buy stocks or corporate bonds. But as savings instruments for the broad masses, these involve risks and require careful research. In a state of war, individual savers could hardly be expected to put their savings in bulk into debt and equity. Losses of savings may have caused social instability.

With a bank-based economic system, the authorities could simply guarantee depositors' money. Should a bank be allowed to fail, the central bank could bail out depositors. At least the principal of a household's savings was thus

guaranteed. In exchange for high security, however, savers had to accept lower returns. This allowed more funds to remain invested.

From about 1937 onward, government officials encouraged savings with annual savings campaigns. The media were used to spread the message that spending is bad and saving is good. Local bank, credit union, and post office branches acted as the collectors of people's savings, ensuring that purchasing power would be withheld. Bureaucrats discouraged all other forms of saving by effectively making them equivalent to bank saving, and stocks became like bonds or deposits, yielding a fixed, administered return. That yield was pushed down so as not to compete with bank deposits.

Bankers, the Money Creators

By far the most important reason why war planners preferred bank funding as the main conduit of resource allocation was that banks create most of the money in the economy. And they make the crucial decision of who will get this money. Their actions thus have a profound impact on equity, growth, efficiency, and inflation. By withholding purchasing power from one sector and allocating newly created money to another, the entire economic landscape can be reshaped.

Given this pivotal role of the banks, it is not surprising that the reform bureaucrats and war planners had developed a strong interest in them. The German economists they read argued that banks and economic growth were crucially linked.[2] Economic growth can be accelerated if the inputs used—land, labor, capital, and technology—are increased. As we saw, the war bureaucrats had already found efficient ways of organizing the labor market and firms' management in order to ensure effective mobilization of land and human resources. The banks served as their main tool to maximize capital and technology inputs, direct resources and steer growth.

How to Fund Growth: Print Money

Technology is indeed nothing but new, more efficient ways of rearranging given resources. It is like a new recipe, which delivers a tastier and superior output that is then valued more by consumers. Innovators and creative entrepreneurs that have hit on a new recipe often have a problem, though: They have no money to found a company that could implement their idea on a large and viable scale. The entrepreneur could either get funding in the markets or borrow from a bank, and may not mind how the money is obtained. But for the whole economy there is a crucial difference. If an investor funds the entrepreneur, the investor would have to pull money out of other investments (such as bonds, stocks, bank deposits, or even other venture firms). As a result, already existing purchasing power would be diverted to a new

use, and some other economic activity would have to be scaled down. Despite the innovation, there is no economic growth, as the national income pie is determined by the quantity of credit creation, which remains unchanged. By contrast, if the entrepreneur instead borrows money from the banking system, additional purchasing power would be created and no previous projects need to be stopped.

Productive and Unproductive Credit Creation

This sounds almost too good to be true. Could all new and good ideas be funded just by central bank money printing or bank loans? In principle, yes. Normally, the worry is that excessive money creation would result in inflation. However, as long as the money is used for productive projects that also increase output, there won't be inflation; although more money has been created, the money was used so cleverly that there is now also more output. Both credit and output would rise, and prices would stay the same. What many classical and neoclassical economists failed to recognize is that credit both provides the demand for new goods and allows their creation. It therefore simultaneously brings about both the demand for and supply of new goods. If, on the other hand, extra money was created that was then used not to implement new technologies and create more output, but simply for consumption or speculation, more money would chase an unchanged number of goods and services. Prices would be driven up and inflation would ensue.[3]

There is a downside, though. In a free market economy, banks can create credit and allocate it to anybody they wish, even to borrowers who put it to unproductive use. Ultimately, though, this would also not be good for the banks, because lending for unproductive purposes is much riskier. Only when it is used productively is credit likely to generate the income that is necessary to pay interest and repay the principal. However, banks do not find it easy to recognize the actual risk involved in their loans. Each bank might think it will get the money back on its real estate loans. But taken together, all banks will end up lending more money to the real estate sector than can be used productively. As a result, money is created, but no new output and no new income can be derived from it. Eventually lenders will be unable to pay back the loans. As the excessive credit creation turns into bad debts, banks become more risk-averse and reduce lending. This slows economic growth.

Putting a Check on Bankers

Banks are special, since they serve the public function of creating and allocating money. But it is not clear that bankers, when left to their own devices, allocate funds such that the welfare of the entire community is enhanced. Banks may decide not to extend loans to a farmer who wants to introduce

organic farming techniques, because it might consider these ventures too risky or not profitable enough, and instead allocate purchasing power to a real estate speculator who does not add to social welfare. German economists were particularly critical of the U.S. experience of the 1920s, when banks were encouraged to create money and give it to speculators, who wasted it. They argued that the crucial function of banks to create and allocate purchasing power had to be utilized for the common good of the nation.[4] Even though a government may be democratically elected, the bankers are not. The bank owners often belonged to a small number of families who had wide-ranging power, sometimes over entire countries. Commentators noted that especially in a U.S.-style democracy, bank credit should be regulated by the government to maintain equity and fairness. U.S. founding father Thomas Jefferson was for this reason always opposed to the establishment of a privately owned central bank, and the U.S. Constitution was designed to grant the right to issue money specifically only to the U.S. government.[5] The Japanese war economy bureaucrats agreed that they needed to monitor the activities of banks carefully. At the same time, they realized that bankers could be turned into their allies and helpers in doing their job. By "guiding" the banks, officials could direct newly created money to productive projects.[6]

Controlling the Controllers

Control over credit creation, however, had to include the central bank. The supply of money used in an economy is made up of the sum of the credit creation of the banks and the central bank. The latter can increase or reduce the amount of money in the economy. But it also wields enormous direct control over the credit creation of banks.[7]

Given their different understanding of the role of the state—namely, to serve the community—the Japanese bureaucrats could not accept that, even in supposedly democratic countries, the central banks were owned by private bankers.[8] How could one expect the U.S. Federal Reserve system, the Bank of England, and the German Reichsbank to serve the public interest when in fact they were partly or wholly owned and controlled by private bankers?[9] And closer to home the question was pressing: How could the Bank of Japan be left a joint-stock company, in large part in private hands?

In line with the German economists whose books they had studied, the Japanese war economy theorists believed that the central bank should be controlled by the government. And it should, in turn, exert control over banks to regulate the quantity and allocation of money creation, such that it would serve the nation's interests.[10]

When the reform bureaucrats realized the importance of banking in shaping the economy, they started to study how central bankers supervised the

banks.[11] Some central banks claimed to use reserve requirements as a policy tool. Others said they set the official discount rate and thus encouraged or discouraged credit. In reality, neither tool was very effective. The discount rate or short-term interest rates were not necessarily related to economic activity. And the reserve requirements were too blunt a tool to be used strictly. If many banks failed to meet the reserve requirement, the central bank would be forced to lend enough money to the banks so that they would meet it, thus defeating the purpose. The alternative, though, was to watch how banks would try to borrow money from each other to meet the requirements, pushing up interest rates so sharply that it could disrupt the economy. Due to this problem, central bank officials often say that they cannot control the money supply. Yet there is a way for them to control the quantity of purchasing power created by banks—they can set loan-growth targets to banks.

The Secret Control Tool

This was a method pioneered by the German central bank, the Reichsbank. It already had gained invaluable experience during the First World War and in the 1920s in restricting overall credit growth to desirable levels and also in allocating the newly created money to preferred sectors. During the 1920s, the Reichsbank, under its president Hjalmar Schacht, also provided strict "guidance" to the banks regarding their loan extension. The discount rate—the short-term interest rate at which banks could officially borrow from the central bank—was still announced, but it had become more of a public relations tool. By 1924, inflation had been brought under control. But the Reichsbank's "guidance" continued virtually uninterrupted for years—indeed, until 1945.[12]

The procedure was simple: Each bank had to apply to the central bank for its loan contingent for the coming period. The banks then proceeded to allocate their contingents among borrowers. Once the contingent was used up, the central bank would refuse to discount any further bills presented by that bank and would punish further credit expansions. Since there was no legal basis for these credit controls, the Reichsbank relied on "moral suasion," that is, informal administrative pressure under the threat of sanctions that could be highly costly for the banks. One internal Reichsbank memo of 1924 dryly notes that the central bank wields "substantial means of exerting pressure," which "it will not hesitate to employ."[13]

Schacht, Credit Dictator

The credit control system imposed in Germany handed enormous power to the central bank. Since the Reichsbank had been made independent from the government after the hyperinflation of 1924, it could do as it wished.[14] It was only a small step further to give the banks detailed instructions about the

sectoral, regional, and qualitative allocation of their credits. Reichsbank president Schacht made ample use of this power. By giving instructions to banks about what type of industrial sector and even which companies to lend to—and which ones to cut off from lending—Schacht engaged in a far-reaching structural economic policy, favoring specific regions, sectors, and institutions that he considered "productive" and pushing for corporate restructuring. The latter was getting fashionable in Germany, the United States, and Japan under the label "rationalization." Schacht argued that to advance rationalization, firms must merge and "uncompetitive" firms must be forced into bankruptcy. Schacht put such structural changes above the need to stimulate the economy. Consequently, unemployment remained a problem throughout the 1920s.[15]

Commentators noted that "many injustices and disagreements about the details are unavoidable."[16] Numerous observers argued that in a democracy such vital decisions could be made only by parliament and the elected government. Indeed, the Reichsbank had become the actual German government, easily superseding the fragile and short-lived Weimar governments in terms of influence on the economy. Governments fell at a hectic pace, but Schacht remained firmly enthroned from 1924 until he resigned in 1930, a period that turned out to be crucial for Germany's later development. Contemporaries recognized in him a "credit dictator" or "economic dictator" and called the Reichsbank Germany's "second government."[17]

Introducing Credit Controls in Japan

In Japan, the reform bureaucrats had studied the Reichsbank's methods and realized the enormous potential offered by central bank credit controls over the banking system.[18] They had dispatched officials to Berlin, based in the Japanese embassy or more directly at the Reichsbank. This included Hisato Ichimada, who had been sent by the Bank of Japan, and who featured prominently as the Bank of Japan's postwar credit dictator (see the next chapter).

The first law to start up the controlled war economy—initially called a "quasi-war economy," since the measures were partial and the country was officially not at war—was the Capital Flight Prevention Law of 1932 and the Foreign Exchange Control Law of 1933. They were aimed at preventing money from being transferred abroad, and also served to regulate imports. The staff of the newly created foreign exchange control section inside the Ministry of Finance became an experienced core of economic controllers, adept at directing the flow of funds.[19]

Having come to power with the beginning of open hostilities in China in 1937, the reform bureaucrats moved to control the allocation of money through the Temporary Funds Adjustment Law of 1937. This law brought banks and their investment and loan decisions under strict control by the

central bank and the Ministry of Finance. Funding through the stock market was reduced to a trickle, and the banking system was relied upon for resource allocation.

It was now time to use the central bank for the purposes of the war planners. "In the period before World War II, and particularly before 1932, the Bank of Japan did not have a close relationship with the commercial banks and the money market except in times of crisis, when it acted as lender of last resort."[20] In 1942, the war leaders brought the Bank of Japan directly under the control of the government and its finance ministry by translating Hitler's new Reichsbank Law of 1939 and introducing it as the new Bank of Japan Law.[21] Together with the capital flow and foreign exchange control laws, this completed the system of financial controls.

The 1942 law stated clearly that it was the central bank's job to work toward the full mobilization of resources to achieve maximum output growth. Article 1 stated that "the purpose of the Bank of Japan shall be to adjust currency, to regulate financing and to develop the credit system in conformity with policies of the state so as to ensure appropriate application of the state's total economic power." Article 2 stated that "the Bank of Japan shall be operated exclusively with a view to accomplishing the purposes of the state."[22]

To simplify the credit allocation regime, the number of banks was drastically reduced, from about fourteen hundred by the end of the 1920s to a mere sixty-four by the end of the Second World War. Similar to the control associations in various industries, the banks were organized in so-called financial control associations under the umbrella of the National Financial Control Association. As in other industries, it stayed in place in the postwar era, as the Japan Bankers' Association.[23]

Bank of Japan at the Control Levers

Banks were ideal as bureaucratic tools to direct resources. All that was needed was to impose detailed guidelines on bank lending, which the banks would have to follow. In order to ensure that firms with nonpriority investment projects would not compete for scarce resources by raising funds in the stock market, various administrative measures were employed to restrict equity finance and corporate debt issuance.

The Bank of Japan acted as the control center of the creation and allocation of purchasing power. Its governor headed the National Financial Control Association, which was operated by the BoJ and implemented the resource allocation plans worked out by the Cabinet Planning Board. The plan was structured on a top-down basis: First, the needed output was decided upon. Then a hierarchy of manufacturers, subcontractors, and raw-material importers was determined. Finally, the banks were required to ensure that purchasing power

was made available for all the firms involved to be able to acquire the inputs into their production process. While shareholder influence was eliminated, competition was ensured on all levels, because the employees of companies and also of the banks were made to compete in ranking hierarchies for promotion and other rewards.

Thanks to them, resources could be allocated to industries of strategic importance—during the war it was the munitions industry. Based on plans for the overall output needs, borrowers were classified into three categories: A for critical war supplies, such as munitions and raw-material companies, B for medium-priority borrowers, and C for low-priority borrowers that manufactured goods for domestic consumption and items considered "luxuries." The allocation of loans to sectors in the B category was restricted, and lending to sectors classified as C was almost impossible. The manufacturers included in category A would be assigned a "main bank," whose job it was to ensure that enough loans were given to the firm in order to meet its production targets. The firms were themselves part of a hierarchy of subcontractors and related firms, which were grouped so as to ensure fast and efficient production of allotted output targets.[24]

This system quickly reshaped the economy. It ensured that only priority manufacturers received newly created purchasing power. Low-priority firms and industries were weakened, while the strategic firms and sectors grew rapidly. Manufacturers of luxury items, if not yet transformed for war production (such as the piano maker Yamaha, which retooled to produce aircraft propellers—a wartime legacy that enabled the firm to diversify into motorbike production after the war), simply could not raise any external funds. Purchasing power was not used for unnecessary sectors or unproductive purposes. Loans were allocated to achieve the goals of the war economy: maximization of the desired type of output.

Credit Controls Maintained After War

During the war the desired type of output was munitions. In the postwar era it was manufacturing of industrial and consumer goods. The system of controls worked so efficiently that it was completely carried over into the postwar era. A large number of the postwar links between companies in the various business groups, their subcontractors, and their main banks originated in the wartime credit allocation system.[25]

Making sure that banks complied with the bureaucratic lending guidelines was not difficult. During the war, the mobilization laws stated plainly that the private sector had to do what it was told by the bureaucracy, with extremely heavy penalties for noncompliance. In the postwar era, this was replaced by other incentives to comply with bureaucratic wishes.[26] But even without these

tricks, banks had to do as they were told in the postwar era, since the vagueness of the legislation that hailed from the war era gave great power to the bureaucracy.[27] On that basis, government officials could issue administrative orders or notifications (*tsutatsu*), similar to the wartime imperial decrees issued by the bureaucracy. Private-sector institutions were not in a position to argue with the government. Banks were just as dependent on the bureaucracy as the firms were dependent on the banks. Bankers' resistance was further reduced by the continuation of the loan guarantee system, which minimized credit risk and ensured that banks would be bailed out if lending turned sour.

Economic growth would have been lower if Japan had followed laissez-faire policies without official intervention. Industries not crucial for investment and high growth, as well as consumers, would have competed for limited purchasing power. Indeed, given the abundance of labor in the postwar economy, a free market economic system would have tended to allocate resources toward labor-intensive industries, making it difficult for Japan to build up heavy industries. Without credit controls, too much money would also have been allocated to highly unproductive uses, such as real estate speculation or luxury consumption. Moreover, it would not have been possible to keep interest rates at artificially low levels, subsidizing the preferred industries. Finally, free capital flows would probably have created the types of problems that occurred in Thailand and Korea in the late 1990s, when fixed exchange rates encouraged large-scale borrowing from abroad (largely needlessly, since domestic banks could have created the money), which triggered a crisis when foreign investors pulled out. Given the crucial link between credit and growth, it is no exaggeration to say that a major reason for Japan's successful postwar economic development has been the system of financial controls, which "guided" credit to high-value-added sectors and made the most of the wartime economic structure.[28] The financial sector was the "general staff behind the battlefield in this total war called high economic growth."[29]

The First Bid for Central Bank Independence

Alchemist Ichimada

In 1946, with the approval of the U.S. occupation, a young Bank of Japan official named Hisato Ichimada was appointed BoJ governor. He had previously received an outstanding training in the intricacies of credit creation. Having spent time at the crucial Banking Department, which deals with the banks and supervises the extension of central bank credit, the BoJ sent him to Berlin, where, from 1923 to 1926, he witnessed Hjalmar Schacht's ascendancy to "credit dictator." He studied Schacht's credit control policies in detail and regarded Schacht and his highly independent Reichsbank as a role model for the Bank of Japan.[1] Ichimada was in many ways deeply impressed by the experience. "What left the strongest impression on me in Germany was central bank president Schacht," he informs us in his memoirs.[2] Despite his young age, he personally became acquainted with the great credit dictator. The two seemed to get along well. After the war, when Ichimada had become BoJ governor, Schacht even visited his Japanese acquaintance (although Schacht could not stay long, as Ichimada lamented, since he was under investigation by the war crimes tribunal in Germany).[3]

After Ichimada's return to Japan he was again posted to the Banking Department. He worked at this key department uninterrupted for a total often years (from 1927 to 1937)—longer than usual. This, together with his posting to Germany, indicated that he had been tapped for higher office. After a short stint as Kyoto branch manager, he spent four years in the Auditing Bureau, quickly rising to become its chief in 1942. As an auditor, he monitored for what purpose loaned money was used—one of the key aspects of Schacht's qualitative allocation of funds. The main criterion, just as with Schacht's Reichsbank, was to decide whether loans were used "productively" in the eyes of the central bank.[4]

The time to make full use of his knowledge and experience came in 1942, when the system of a mobilized war economy was being fully implemented and the National Financial Control Association was established. Initially, simultaneously with his function as Audit Bureau chief, Ichimada became the Control Association's first secretary-general, placing him right at the heart of Japan's war effort: The Control Association was the nerve center of the mobilized war economy. It was operated by the Bank of Japan, with the formal top posts of chairman and vice chairman being held by the Bank of Japan governor and vice governor.[5] However, Ichimada, "as secretary-general of the association, was in effect responsible for supervision and guidance of its daily affairs."[6] Ichimada was now in charge of doing whatever it took to provide the priority industries with funds, and preventing nonpriority firms from claiming scarce resources. This could include bank mergers and injections of BoJ funds, but its main function was to allocate credit— called *yūshi assen* (loan coordination) at the time.[7]

Bad Debts in the Banking System

When the war was over, banks' loan books had deteriorated. In the last, desperate years of the war, they had been ordered to extend ever-rising amounts of money to war industries. It is one of the principles of banking that lending for unproductive purposes tends to end up as bad debt. War loans of a country just defeated are the worst kind. The other major asset of the banks was war bonds and other wartime government debt paper. Naturally, there was hardly a market for these, and if traded, they would fetch only a fraction of their face value.

While most bank assets were worthless, their liabilities still existed—money deposited by individual savers. Assets being smaller than liabilities, and equity being insufficient to make up for the difference, the entire banking system was practically bankrupt. On top of that, the commercial banks were weakened by the initial moves toward *zaibatsu* dissolution.[8]

Challenge by the Control Bureaucrats

The asset problems of the banks were sufficiently large to create a major credit crunch and deflationary downturn of the economy. To counteract that, credit needed to be created. In the early postwar years there were many experts who realized this and—quite unlike the 1990s, as we shall see—acted quickly to achieve a recovery. Thanks to the experience with the control of creation and allocation of credit during the war, there were not only Bank of Japan staff but also Ministry of Finance, Munitions Ministry, and Cabinet Planning Board officials who knew that credit creation needed to be expanded. The

wartime planning and credit allocation program operated by them had delegated implementation to the Bank of Japan, but decisions were made by these government institutions. The Cabinet Planning Board was revived in the form of the powerful but short-lived (1946–52) Economic Stabilization Board (ESB or Keizai Antei Honbu), established in August 1946.[9] The Board initially used the Reconstruction Finance Department inside the Industrial Bank of Japan (IBJ) to supply the economy with funding.[10] In January 1947, it was separated and established as the public Reconstruction Finance Bank (Fukkō Kinyū Kinko), whose job was to provide preferential funding to strategic industries.[11] It was in turn funded by government bills that the central bank had to discount. Second, the government planners took the initiative to reestablish the priority production system from the wartime era with the 1947 Regulations on the Provision of Funds by Financial Institutions (Kinyū Kikan Shikin Yūzū Junsoku), announced by the Ministry of Finance.[12] All that had to be done was to switch the priority classification from war objectives to peacetime goals. The Ministry of Finance reformulated the wartime loan classification system. Based on a "priority listing for lending industrial funds," limits were set on the maximum amount of loans each financial institution could extend. A ranking was established of equipment and operating funds for 460 types of business in four categories, A1, A2, B, and C, "in almost exactly the same way as the financing arrangements based on the wartime Emergency Funds Adjustment Law."[13] The latter wartime law was replaced by MoF with the equivalent Emergency Financial Order (Kinyū Kinkyū Sochi Rei).

The Bank of Japan was unhappy about the activities of the Economic Stabilization Board, for it encroached on what the central bank considered its turf: the creation and allocation of credit. The Bank of Japan resented the fact that the priority categories were defined by the ESB and MoF.[14] In accordance with the wartime Bank of Japan Law, MoF expected the central bank to act merely as its agent by faithfully enforcing MoF's instructions. That was not Ichimada's vision of the central bank's role.[15] Second, the central bank resented the activities of the Reconstruction Finance Bank, an institution that it did not control and which challenged its monopoly on the control of the creation and allocation of credit.[16] If the activities of the wartime bureaucrats in determining the creation and allocation of credit continued, the central bank would not regain its pivotal role in the economy. Ichimada lost no time. Virtually simultaneously with the priority production system, he established his own, additional system to direct funds to those priority industries high on the list.[17] Meanwhile, the implementation of MoF's priority lending categories was largely incapacitated. Ichimada achieved this by assigning only a small section of eight to ten staff to this complex task (MoF's guidelines had become quite detailed, running to twenty pages), a group whose other job

was the equally complex task of administering frozen bank accounts from the wartime period.

The Bank of Japan's control had already been asserted a year earlier, when the director of the Banking Department had issued instructions that "in principle" banks were not allowed to increase their outstanding loan balance beyond the balance of 20 March 1946 without a permit from the Bank of Japan, as well as the government.[18] This prevented low-priority industries and consumers from laying claims to scarce resources. Ichimada now adopted a two-pronged reflation policy. First, while the banks were damaged by bad debts, he borrowed another trick from Hjalmar Schacht's tool kit and turned the Bank of Japan itself into the banker to the nation. Schacht had used active discounting of certain types of bills issued by official organizations (such as Mefo) to selectively direct credit to priority industries or projects.[19] Ichimada did the same in the early postwar years with his "stamped bill system," under which companies in specific sectors were invited to apply for funding directly, or via their banks, to the Bank of Japan's Banking Department. The Bank of Japan discounted bills of exchange from selected firms in the coal industry, fertilizer manufacturing sector, textile fabrication industry, and certain regional industries and exporters (which competed for export trade bills to purchase necessary raw material imports).[20] Retail, agriculture, education, and construction were then considered to be of lower priority. Most domestic-consumption-related industries fell into the low-priority category. Sectors such as real estate, department stores, hotels, restaurants, entertainment, publishing, and alcoholic beverages—not to mention consumers themselves—were without much hope of obtaining funds. Ichimada felt that Japan could ill afford such luxuries.[21] All this took place in the Loan Coordination Division (Yūshi Assenbu) of the Bank of Japan's Banking Department.[22]

Banks were brought back into the process through help in restoring their balance sheets and through Bank of Japan "guidance" of their discounting of bills. Restoring banks' balance sheets was easy; it was nothing more than an accounting problem. All Ichimada needed to do was to have the BoJ buy their worthless wartime bonds for good money. In its own currency, a central bank does not have to worry about bad debts. It could just print money and keep the purchased assets on its balance sheet in perpetuity.[23] This made the banks dependent on the goodwill of the central bank, and willing to cooperate with its informal guidance.[24] If the central bank wished, it could extend unlimited funding to them. The Bank of Japan, like the Reichsbank, knew that as long as newly created money was used productively, it would result in an increase in output, not in prices.[25] In the end, Ichimada had reinstated full control over both the quantity of new bank loans and their sectoral allocation in a mechanism that later became known as "window guidance."[26]

First Victory Against MoF

The credit provision programs were highly successful. But not all credit was due to the central bank. The ESB's activities, including the lending by the Reconstruction Finance Bank, had a lot to do with it. Government deficit spending, as well as the Reconstruction Finance Bank, was funded through the issuance of short-term financing bills or bonds that the central bank had to discount.[27] Demand picked up as a result of the provision of funding by the central bank and banks on the one hand, and the Reconstruction Finance Bank on the other. There was no deflation. To the contrary, it soon turned out that demand was stimulated beyond the still limited capacity of the economy, which suffered from supply bottlenecks and lingering problems with infrastructure destroyed by the U.S. bombing raids. Hence inflation became a problem.

The inflation was an opportunity to damage the reputation of the ESB, MoF, and the Reconstruction Finance Bank. The Bank of Japan immediately put the blame on the lending by the rival Reconstruction Finance Bank and on the budget deficit, which the central bank was forced to finance. It had little control over these, and thus it argued that these factors were the reason for the inflation.[28] Ichimada's views were heard in Washington, which first instructed SCAP (the Supreme Commander for the Allied Powers) to issue a Nine-Point Economic Stabilization Program in December 1948 that recommended tighter monetary and fiscal policies. This program was published in Japanese jointly by Ichimada and his assistant Toshihiko Yoshino—and even became a best-seller.[29] Washington next sent Joseph Dodge, president of Detroit Bank, to Japan with the rank of minister from February to April 1949 as adviser to SCAP. He is known to have been on less than good terms with MacArthur.[30] The Dodge plan, passed without alterations by parliament, prescribed an "overbalanced" budget and thus ended deficit spending and the bulk of central bank underwriting of government bills. Second, it decreed the end of the Reconstruction Finance Bank; new loans were suspended immediately, and the institution was gradually wound up.[31] This had long-term implications. It established the principle that henceforth government banks, such as the Japan Export Bank (1950) or the Japan Development Bank (1951), would be funded from postal savings. The central bank welcomed this, because it meant that the government banks had no power to create credit or influence the money supply and therefore also could not influence economic growth. The end of the Reconstruction Finance Bank therefore marked the beginning of the decline of influence by the control bureaucrats at the ESB and MoF. The central bank, together with its client banks, achieved a monopoly on the creation and allocation of new money. It was Ichimada's first major victory against competition to the central bank's power.[32]

Pipeline to the Top

Governor Ichimada's powers were far-reaching. He personally decided whether a project should go ahead or not. As a result, the top leaders of industry, commerce, and finance felt obliged to visit him frequently at the Bank of Japan to obtain his approval of their investment plans. Usually, both meeting rooms of the governor's office were occupied by captains of industry, and Ichimada dashed from room to room.[33]

For many top business leaders this was a humbling experience. The credit allocation was extralegal and "informal," but they had to follow every whim of Ichimada and his lieutenants. There was no committee, not much discussion, and no right to appeal. It was up to the BoJ governor, who did not hesitate to refuse funding. One such occasion leaked to the press, which widely reported how Ichimada had turned down the request by the president of Kawasaki Steel, a top manufacturer, to build another steel plant on a plot of land in Chiba. Ichimada disagreed: "Japan does not need any more steel," he told Kawasaki's Nishiyama. "I can show you how to grow shepherd's purse there."[34]

Ichimada quickly became feared. His decisions over the life or death of a business project earned him the nickname "the Pope." In his 1984 obituary, his successor and close associate, Tadashi Sasaki, explained that, "he was called Pope, because under him the central bank's power was stronger than that of the government."[35] It was impossible to argue with the Pope's decisions. Those who tried to unseat him failed. He was rumored to enjoy the "trust" of the higher powers—the U.S. occupation administration and even more influential figures in the United States—and thus was virtually untouchable.[36]

A big threat to Ichimada and the powers of the Bank of Japan was the plan by the head of SCAP's Economic Science Division and fellow democrats to create a more democratic structure for the powerful central bank, with proper checks and balances. The Economic Science Division recommended the establishment of a separate Policy Board whose task would be to make monetary policy and supervise the operations of the Bank of Japan staff. Ichimada vigorously opposed this plan, arguing that it would reduce the "efficiency" of monetary policy. He prevailed and SCAP's democrats relented. It was agreed to place the new Policy Board inside, and thus under control of the central bank. Ichimada thus was the creator of the system of a "sleeping policy board" that makes no important decisions.[37]

Ichimada's advice was listened to by the U.S. authorities. This included his recommendation not to go ahead with the dissolution of the *zaibatsu* banks. While MacArthur favored the abolition of the wartime government loan guarantee program, Ichimada persuaded him otherwise. The system stayed in place, and by socializing credit risk, many new firms, including an unknown

electronics start-up called Sony, managed to obtain vital bank funding. No doubt Ichimada had powerful backers, for he remained in the job for eight and a half years, setting a record as BoJ governor. After that, he even moved higher, making the transition to minister of finance—a rare move for a true Bank of Japan man, and not repeated in the postwar era.

Window Guidance

Ichimada's key Loan Coordination Division (Yūshi Assenbu) reported directly to him and was independent of other sections. This made it highly unpopular with the rest of the central bank and Ichimada's opponents tried to scrap it. To appease critics, and fend off attempts by the Ministry of Finance to influence its policies, its abolition was announced in 1954.[38] But all credit control powers were retained by the larger Banking Department, which remained loyal to him only and continued its extralegal control over bank credit.

By the early 1950s, the economy was growing at double-digit rates and loan applications had become voluminous. It was around this time that the bank credit allocation system implemented by the Banking Department took its final shape. The governor first decided by how much total loans should grow; then he and the head of the Banking Department, his handpicked junior Tadashi Sasaki, allocated this increase to individual banks as loan quotas. The banks were asked to present their detailed lending plans, down to the names of all large borrowers, monthly to the BoJ. Tokyo banks reported to its Nihonbashi headquarters, others to its thirty-three regional branches.[39] The BoJ then "adjusted" the lending plans to fit its credit allocation plans.[40] Since bank officials came to the BoJ to be told virtually over the counter (the teller window) of the Banking Department how large their loan quota was going to be, the procedure came to be known as "window guidance" (*madoguchi shidō*).[41]

As with Japan's corporations, banks were also run by managers who were unfettered by shareholders and interested in market-share expansion. Had these managers been left to their own devices, fierce market-share competition among the banks would have resulted in excessive dumping of their product: bank loans. Window guidance was the solution, as it constituted a classic industry cartel that limited competition. It also enabled convenient top-down control of the sector. The growth orientation of the banks ensured that they would always use up the maximum of their quota, to maintain their ranking. Indeed, under the procedure, bank rankings never changed during the postwar era, except after mergers.

The BoJ decided the loan quotas of the large city banks first. A proportion of that was then allocated to the other banks. Since the banks in turn allocated their quota among their hundreds of branches all over the country, where they

were further divided and allocated to thousands of individual loan officers, window guidance was the pinnacle of a comprehensive quota allocation pyramid that pervaded the entire economy.[42]

The system worked well in avoiding unproductive credit creation and channeling newly created money to productive activities.[43] Unlike war production, exports now earned foreign currency. Thanks to the continued foreign exchange controls, foreign currency could then be allocated for obtaining necessary imports—raw materials and other inputs. First textiles, then shipbuilding and steel, and later automobiles and electronics were the beneficiaries of allocated purchasing power. Window guidance was the control center, providing the economy with the monetary ammunition. As a result, Japan managed to grow by more than 10 percent per annum in real terms in the 1960s, a pace that caused observers to talk about a "miracle."

Challenge to BoJ Control

There was a fly in the ointment. In the early postwar years there was still lingering (though gradually declining) interference from other institutions, especially MoF and MITI, which made recommendations about priority sectors.[44] The Bank of Japan could largely outmaneuver the Economic Planning Agency and MITI, but it could neutralize MoF only partially.[45] The Ministry of Finance gradually became removed from the credit allocation decisions.[46] However, it allowed this to happen because it was secure in the knowledge that it could interfere in the central bank's actions at any time if it felt it necessary. This was due to the Bank of Japan Law. Apart from the marginal change that resulted from the introduction of the nominal Policy Board in 1949, the law was still the same one that had been introduced in 1942, when the control bureaucrats were in charge. Many of the "New Dealers" in the occupation forces had not been convinced of the need to make the central bank independent from and unaccountable to the government—an idea they considered undemocratic. As a result, legally speaking, the central bank remained a quasi-government agency, subordinated to the Ministry of Finance.

Meanwhile, MoF enjoyed far-reaching legal powers over the entire economy in the postwar era. During the war, MoF had to report to the military-backed government and its Cabinet Planning Board. Its powers had also been restricted by the even more powerful Home Ministry. But after the war, the military had disappeared, the Home Ministry had been disbanded, and the Cabinet Planning Board had become the subordinated Economic Planning Agency. The Finance Ministry was quick to take advantage of the power vacuum. In charge of government budgeting, taxation, customs, financial sector supervision, international capital flows, and fiscal and monetary policy, it

had the best cards of all government agencies. And it did not hesitate to play them. So it also continued to take some interest in credit allocation in the early postwar era.

One way to obtain greater independence was to obscure the actual credit policies taken. The importance of window guidance credit controls was systematically downplayed in public.[47] Simultaneously, MoF was reluctantly allowed to exert influence over interest rates, which the Bank of Japan referred to as important in public while not placing much emphasis on them in its actual monetary policy implementation.[48] Whenever MoF inquired about the BoJ's quantitative or allocative policy, Ichimada and his staff would engage in complex discussions full of technical jargon to make the process appear impenetrable to nonexperts—as it indeed was even to many BoJ staff. Arguing that "there are many technical considerations when conducting operations like the adjustment of the quantity of funds in the market," Ichimada demanded that "therefore, this should be left up to the Bank of Japan."[49]

Another strategy, successfully implemented only from the 1960s onward, was to establish bond markets. This would enable the central bank to engage in complex bond purchase or sales transactions, not to mention repurchase agreements and derivative transactions that created a picture of an immensely complex monetary policy, while in actual fact not achieving much more than producing significant commissions for the brokers involved (who were often retired former BoJ staff).[50] While the Federal Reserve had an open market desk making gross transactions worth tens of billions of dollars per year, and accounting for a large part of all government securities transactions, the Bank of Japan had no such desk, and no such patronage for the securities industry.[51] In the 1950s and early 1960s, there was practically no government bond market, and the stock market remained a sideshow. Thus the financial system consisted really only of direct credit creation by the BoJ and the banks. This was efficient, as bond and stock markets do not create money. But it was also uncomfortable for the BoJ, because it operated in the public spotlight without leeway for independent operations. Any central banker realized that with such simple operations, the Bank of Japan was far too transparent.

The BoJ Fights Back

More pressing to Ichimada was, however, to extricate the Bank of Japan from the power grip of the ministry that the Bank of Japan Law represented. Ichimada's stature ensured that the BoJ's operational independence was not challenged in practice. But he wanted more. So he soon proposed that, as a purely technocratic institution, the BoJ should be made legally independent.[52]

In 1954, having been the longest-serving Bank of Japan governor, Ichimada became minister of finance. Now his control over monetary policy was

legal. The surprising move also allowed him to support the Bank of Japan officials loyal to him. Since the job gave him the upper hand over the Ministry of Finance, he immediately started to lobby for a reduction in the powers of his own ministry and for an increase in the powers of the Bank of Japan. This did not make him popular. But Ichimada was not afraid to show his teeth. An open power struggle developed between the ministry bureaucrats and the central bank.

Revision of BoJ Law

Ichimada and his colleagues at the Bank of Japan lobbied the politicians for a revision of the Bank of Japan Law. They had the support of the banking community. The bankers were a captive audience and basically had to fear informal but painful sanctions if they did not back the central bank.[53] At the same time, they probably hoped that an independent central bank might more closely represent their interests.[54]

In 1956, the LDP government established an investigation committee to consider changes in the Bank of Japan Law. MoF made sure that the committee included some of its own men. It ended up as a forty-five-member assembly of academics, bankers, journalists, and representatives from both MoF and the BoJ.[55] Meanwhile, in December 1956 the prime minister changed, and with him the cabinet lineup. Suddenly, Ichimada was out of a job and Ikeda became finance minister. What happened next was fortunate for Ichimada and the BoJ: In 1957, the economy was heating up so much that a balance-of-payments crisis loomed. The politicians knew whom to call to tame the economy. Ichimada was suddenly back as finance minister. Thanks to tight window guidance, the economy slowed. In the end, Ichimida was finance minister for all three Hatoyama cabinets, as well as the first cabinet under Kishi.[56]

Not by Price Stability Alone

The pro-BoJ forces did not push for outright independence. Too many politicians, with their wartime experience of a subordinated central bank, felt that as an unelected body, the BoJ could not have independent power. So the BoJ modestly argued for some leeway in the implementation of monetary policy and that the goal of central bank policy as stipulated in the BoJ Law should be changed from "supporting government policies" and "maintaining economic growth" to "maintaining price stability." The 1942/1947 BoJ Law indeed failed to mention price stability. Instead, Article 1 states that the objective of the Bank of Japan was to pursue national policy "in order to enhance the total economic power of the nation." The BoJ calculated that the change in the policy goal would imply de facto independence. For it could then refuse MoF

or government policies if it wanted to, by arguing that these policies were not in the interest of maintaining price stability.

The government committee swallowed the BoJ's arguments. In 1958, it recommended that the BoJ should have freedom to decide monetary policy, while MoF would only be able to request a delay of a BoJ decision. It also recommended that price stability should become the main objective of BoJ policy. Keidanren (the Federation of Economic Organizations, Japan's powerful umbrella lobby group of all business associations) endorsed the proposal in 1959 and 1960. Its position paper had been drafted by the Federation of Bankers' Associations.[57]

Hung Jury

But the Ministry of Finance and its allies among the politicians objected. A group of former bureaucrats, including Shinji Arai from MITI, high-growth thinker Osamu Shimomura from MoF, as well as independent intellectuals that had long favored the war economy system, such as Kamekichi Takahashi, fiercely opposed the recommendations.[58] Shimomura had been one of the former MoF control bureaucrats trained at MoF's foreign exchange control department in the early phase of credit allocation.[59] He knew well that the credit control mechanism was the core of the successful system of a mobilized economy and the key tool to create high nonin-flationary growth. In his opinion it probably was too powerful and important a tool to leave in anyone's hands but the government's. The government, they felt, should be able to pursue policies of high growth and a stable currency without being dependent on a central bank that might follow its own agenda. It seems that they realized what a thousand years earlier the emperors of the Sung Dynasty knew, namely, that only a government that controls the creation and allocation of money is actually in charge.[60]

Their lobbying bore fruit. In June 1958, Finance Minister Ichimada was replaced. He had made too many enemies to reach the post that he was rumored to have been designated for—the prime ministership. In 1959, a subcommittee recommended that final directive power over the Bank of Japan would remain with the ministry. Tadashi Sasaki, Ichimada's right-hand man and now in charge of the Bank of Japan as deputy governor, publicly denounced the conclusion. The main committee remained split between those favoring MoF's view and those favoring the BoJ's stance. The views remained so entrenched for the coming year that when the committee had to present a final draft, it instead offered two alternative plans for government action. Plan A would leave ultimate decision-making power over monetary policy in the hands of the minister of finance. Plan B would give independence to the BoJ and grant the finance minister only the power to delay BoJ decisions.[61]

The BoJ Lost the First Battle

In April 1960, the new finance minister, Eisaku Sato (brother of Prime Minister Nobosuke Kishi and nephew of their uncle Yosuke Matsuoka, the great industrialist of the Manchurian war economy), declared that with two conflicting recommendations from the committee, he could not introduce new legislation to change the BoJ Law.[62] Although Sato did not hail from MoF and did benefit from financial contributions by big business to LDP coffers, it seems that he appreciated the power of the credit allocation system and was not willing to pass the control levers out of the hands of the government.

The BoJ Law was not changed. The Ministry of Finance had won the first round in the battle for supremacy over Japan. But it was a hollow victory. In 1963, as part of the liberalization policies in the run-up to Japan's entry into the OECD, the Emergency Financial Order (Kinyū Kinkyū Sochi Rei) was repealed.[63] This removed a potential legal basis for MoF involvement in credit allocation. MoF initially still tried to influence the allocation of private-sector bank loans through the Council on Financial Institutions and Fund Allocation,[64] which was staffed by members from MoF, the BoJ, and banks. During its lifetime, the Council mostly implemented the fund allocation plans submitted by the Ministry of International Trade and Industry (MITI). MITFs Industrial Finance Subcommittee and policy planning department compiled the fund allocation plans, and increasingly discussed their implementation directly with the Bank of Japan.[65] When MITI discussed with the BoJ's Banking Bureau which sectors should receive funds, MoF stayed out of the discussion. Researchers thus concluded in the 1960s that window guidance "is rather free of Ministry of Finance interference because the process of establishing ceilings poses a number of technical problems and because the details of the operations are kept quite secret."[66] As a result, the BoJ was fully in control of the economy and was solely responsible for the swings in the business cycle of the 1960s and 1970s.[67] However, the BoJ's dominant influence over the creation and allocation of money was still in a precarious state: According to the Bank of Japan Law, MoF was still in charge of whatever the central bank did, and could, if it so wished, intervene at any time in the central bank's credit policies.

Now It's There, Now It's Gone

Having made themselves unpopular among many, the leaders of the BoJ felt it opportune to adopt a lower profile. Already in October 1958, when the government committee deliberated the BoJ Law, the BoJ had removed window guidance from public view by abolishing it under the pretense that it had become ineffective. Officially, the Bank of Japan now supervised and monitored

the private banks' reserve position—which until then had not been an active policy tool.[68] But in actual practice the reserve requirements were fixed such that a certain desired credit expansion of the entire system would result. In other words, window guidance continued in practice.[69]

Defeated BoJ Flexes Its Muscles

When Hayato Ikeda became prime minister in 1960 and his cabinet made the "income doubling plan" its major policy aim, fiscal expenditures increased by more than 25 percent per year. This was possible only because of the extremely high growth, which boosted tax revenues beyond everyone's expectations. But high growth was the result of the BoJ's expansionary credit policies. Having previously abolished window guidance, in 1964, the Bank of Japan, under Deputy Governor Sasaki, suddenly reintroduced the credit controls, broadened their scope to further include trust, regional, and mutual banks, and used them to slow the economy.

It was foreseeable to Sasaki what would happen: Economic growth dropped. While it clocked up to 11 percent in 1964, it dropped sharply to 5.8 percent in 1965.[70] Fiscal revenues were hit sharply. For the first time in many years, revenues failed to meet the original revenue projections. A sizable fiscal deficit loomed, but the Fiscal Law still said that no government bonds could be issued to fund it. Sasaki was probably not unhappy to find that politicians began deliberating a change of the law.

But events seemed to get somewhat out of hand when stocks crashed in response to the profit slowdown. As small investors pulled their money out of the market, the fourth biggest broker, Yamaichi Securities, experienced a run by its customers. Finance Minister Kakuei Tanaka was quick to take appropriate action. He went straight to the Bank of Japan and demanded unlimited credit for Yamaichi Securities and an increase in credit creation for the economy. Although the Bank of Japan argued that fiscal policy should be loosened, its subordinated legal status meant that it could not openly defy such clear-cut and justified direct demands. It had no choice but to pump in the needed money.[71] The window guidance loan quotas were raised.

As window guidance had again caught some public attention, it was once more abolished in July 1965. Or had it done its job? While the BoJ loathed Tanaka's energetic intervention, the central bank had managed to extract one major concession from the politicians and MoF: Tanaka agreed to change the Finance Law, making the issuance of bonds possible. In November 1965, the first batch of Japanese government bonds (JGBs) came onto the market. This change tipped the power balance between MoF and the BoJ distinctly in favor of the BoJ.

The BoJ had won another battle. With bonds available as a means to fund government spending, politicians and MoF were less likely to demand extra

money from the BoJ—and hence they were less likely to challenge its control over credit creation.[72] At the same time, the Finance Law did not allow the central bank to underwrite newly issued government bonds. So the BoJ could not be easily forced to monetize fiscal policy. This meant that it now had the power to render fiscal policy ineffective, by deciding whether to back it with credit creation or not. A gap had opened between monetary and fiscal policy.

In reality, there had been no need for the government to borrow in the markets via bond issuance, because it could instead have asked the BoJ to create new money to fund productive and thus noninflationary spending. This would have rendered fiscal policy effective, as it would have been backed by credit creation. But those days were over. The government was now going to fund fiscal stimulation by borrowing through bond issuance, which also raised the economic burden. Money printing is free, but bond issuance forces several generations under the yoke of interest, and interest on interest.

The Bank of Japan had not succeeded in changing the Bank of Japan Law and was not likely to do so in the near future. However, the new Finance Law was a good second best. It was the thin end of the wedge. It meant that the golden days of fiscal virtue of the Ministry of Finance were numbered. From now on, politicians could spend by borrowing from investors and large financial institutions. Given this option, politicians would inevitably push to use it—especially when BoJ credit controls had slowed the economy. When they wanted to spend more, therefore, they would no longer put pressure on the BoJ, but instead exert it on MoF. So the Ministry would ultimately preside over an ever-increasing national debt mountain. That could not be good for its reputation or standing.

"The Ghosts That I Called ..."

Meanwhile, the BoJ was experimenting with its credit controls. It found that it could use them to fine-tune bank lending without using the bullying techniques of Ichimada. The war economy structure played into its hands. If banks were left to their own devices, they would compete fiercely against each other to gain greater market shares. To do that, they had to dump their product. Hence they would end up lending excessively. As in other industries, window guidance controls were the necessary cartel to curb excessive competition. This meant that the Bank of Japan could quite easily increase bank lending simply by setting high loan growth quotas or by temporarily claiming that window guidance had been abolished. This happened, for instance, in the mid-1960s, when the BoJ wanted to accelerate the economy again, after the Finance Law had been changed. It told the banks that there was no more window guidance. Credit creation rose, purchasing power in the private sector soared, and consequently asset prices rose, domestic demand expanded, and imports were sucked in.

During the 1960s and 1970s, window guidance was repeatedly abolished and then quickly reintroduced.[73] Since the BoJ presented itself as champion of free markets, credit controls were an embarrassment. They also had no legal basis. Official publications either failed to mention window guidance or downplayed its role by calling the credit controls "voluntary." The game of abolition and reinstatement continued throughout the postwar era. It served to keep the controls ambiguous. In reality, monthly and quarterly hearings were never abolished, and it was here that the informal power to control and allocate credit was exerted. Banks always had to receive approval for the lending plans, and the Banking Department used the threat of sanctions, such as reduced loan growth quotas, to keep the banks' "plans" identical with its own.

Bank of Japan Smoke Screens

Having learned his lesson, Ichimada admonished his successors: "It is better for the BoJ not to attract attention and remain as quiet as the forest of a rural shrine."[74] Its dubious legal status, and the claim that it was purely "voluntary," helped to downplay the role of window guidance. Researchers who examined the controls were fobbed off with a number of other smoke screens. One was to argue that window guidance was just a loan ceiling, without any qualitative allocation of loans across industrial sectors. But in actual fact it was a quota that was not to be left unused. All loans were broken down not only into sectors (such as loans to individuals, wholesale/retail, real estate, construction) and more detailed subsectors (iron and steel, chemicals, etc.) but also by size of company (small and medium-sized businesses versus large businesses) and by use (equipment funds, working funds).[75] All large-scale borrowers had to be listed by name.

Another argument put forward by BoJ staff was that controls were never effective and hence not important. Yet banks were punished for over- or undershooting their loan growth quotas. Compliance was assured by the monopoly power of the central bank to impose sanctions and penalties, such as cutting rediscount quotas, applying unfavorable conditions to its transactions with individual banks, or reducing window guidance quotas.[76] All these would cost banks dearly. In order not to fall behind the competition, they had no choice but to play the game and always meet their quotas.[77] Contemporary researchers therefore concluded that window guidance was always implemented by the banks.[78]

The BoJ countered by arguing that the controls may have been effective in the early postwar era, but soon afterward, as the economy became more sophisticated, they lost their impact. What is true is that they were much more visible in the early postwar era, because there were hardly any other financial tools. But the mere fact that the BoJ increased the number of its policy tools

subsequently does not mean that the original tools were not the most important ones.[79] Until the 1970s, researchers examining the BoJ's operations could not fail to conclude that, in reality, window guidance was still the main policy tool. It was so powerful that it rendered other policy tools mere support mechanisms.

To convince the world that window guidance was not important, the BoJ stepped up its "research" publications, produced by its Institute for Monetary and Economic Studies and its Research and Statistics Department. Since the 1970s, most publications have clearly downplayed the importance of window guidance in theory and practice. In 1973, in its English-language book on its conduct of monetary policy, the BoJ claimed that, really, it followed orthodox central banking policies: "Window guidance is, in its nature, a supplementary tool of orthodox instruments of monetary policy—that is, Bank rate, open-market operations and reserve deposit requirements. It is used more as a weapon of monetary restraint than otherwise... It must be stressed that it is a form of moral suasion, so that it presupposes cooperation on the part of financial institutions."[80]

The BoJ publications gradually moved interest rates to center stage, claiming that the central bank was making monetary policy by manipulating the official discount rate or call rates. To shift public attention, the Bank of Japan increasingly introduced open market operations and developed a market for short-term paper, in which it could intervene by buying and selling.

Monetarism as Smoke Screen

To remain in charge of monetary policy and conduct it independently, if not by law, then at least in reality, not only did the BoJ make the public believe that its main policy tool was interest rate control, but Bank of Japan publications also propagated a framework that seemingly explained the determination of its monetary policy: monetarism. An article published by the Bank of Japan in 1975 emphasized the importance of the proper level of the money supply.[81] In 1978, the Bank of Japan officially introduced monetary targeting, a procedure by which the central bank selects a certain measure of the so-called money supply, such as M2+CD, and at the same time announces a specific target for its growth rate that was to be attained in the next time period, such as the coming six months.

Most countries that introduced monetary targeting failed. The Bank of England went through a number of monetary targets without success. It finally abolished the procedure entirely in the mid-1980s. The Bank of Japan was far more successful. It met its monetary targets with the utmost precision, awing monetarists all over the world.[82] The monetarists were pleased. The BoJ seemed living proof of their beliefs. Meanwhile, in international central

bankers' meetings BoJ staff were smug in the knowledge that their policy had little to do with traditional monetarism.[83] By precisely controlling credit creation through its window guidance it could, as a side product, also achieve any targeted goal for deposit measures such as M2+CD.[84]

The advantage for the BoJ was that according to monetarism, the central bank should set money supply growth targets in order to serve the sole objective of price stability. Monetarism "thus makes a strong case for the independence of the central bank. It is small wonder then that central bankers should use monetarism as a shield with which to defend themselves against the multifarious political pressures that may undermine their autonomy. BoJ officials pay serious attention to monetarism not because they believe in the veracity of the doctrine but because it may help them keep external pressures from intruding on the autonomy of their monetary control. In short, the BoJ's monetarism is a political tactic. The Bank's autonomy was greatly enhanced during the latter half of the 1970s... The 'monetarism' that the BoJ emphasized after the mid-1970s should be regarded as the Bankers' ploy to guard their own autonomy in the face of such political pressures."[85]

As time went by, more and more economists, commentators, and government officials had forgotten about the key role played by window guidance credit controls. Indeed, by the early 1980s it had sunk into obscurity. As in the days of Kublai Khan's China, the absolute rulers over the country were the ones who created and allocated purchasing power. Henceforth, they could act from behind the scenes.

7 Japan's First Bubble Economy

Triumph of the War Economy

The peacetime war economy was highly successful. In the 1950s and 1960s, Japan grew virtually continuously at double-digit growth rates. In 1959, the economy expanded 17 percent in real terms, while inflation remained modest. In 1960, leading economists made the stunning case that Japan could double its national income within the coming decade. Ex-MoF war economy control bureaucrat and economist Osamu Shimomura argued that Japan could probably even raise its GDP two and a half if not three times in this period.[1] In the event, from 1960 to 1970, Japan's real GDP rose from ¥71.6 trillion to ¥188.3 trillion—up 2.6 times. By 1970, Japan had overtaken Germany and soared from the ashes to become the number two economic power in the world.

It had not yet become public or media perception, but the increasing trade surpluses of the 1970s made it appear to U.S. trade negotiators as if Japan had triumphed over the United States after all. Not during the war perhaps, but after the war with its fully mobilized economy that was directed by the guidance of government officials. However, its very success reduced the world's and especially the United States' tolerance for Japan's economic system. The first major trade dispute erupted in the 1960s, concerning textiles. The first round of trade liberalizations had taken place in 1961, but the U.S. side was dissatisfied and demanded abolition of Japanese import restrictions in order to reduce the trade imbalance. Bilateral trade negotiations were bogged down by discussions about individual tariffs and quotas. Meanwhile, U.S. trade deficits with Japan grew from $400 million in 1967 to $1.2 billion in 1968 and $1.6 billion in 1969. The United States attempted to limit Japanese exports of synthetic textiles and wool. But the textile dispute was stuck in "quagmire negotiations" from 1969 to 1970. The Japanese side argued that the U.S. proposal to limit Japanese textile exports violated the principle of free trade.[2] That was true. However, Japan failed to point out that its entire economic system

had been created as a bulwark against manufactured imports and was geared toward maximum exports. Likewise, the U.S. failed to point out that, like any aspiring emerging economy, it had achieved its own economic success also thanks to protectionism and government intervention. Free market economics provided the arguments for the dominant power to gain access to other markets.

In the 1970s, the Japanese automobile and consumer electronics industries were on the ascendancy. In 1970, the U.S. television maker Zenith filed a suit charging that Japan was dumping television sets in the United States. This was hard to prove. Indeed, the true cause of Japanese companies' incredible competitiveness was not explicit dumping by individual companies. It was systemic. Japan's economy was designed to dump its products onto the world markets, a whole nation engaging in social dumping. In 1971, OECD countries had an overall trade surplus of $7.4 billion. Of these, $5.8 billion was accounted for by Japan.

As in other industries, American and European market leaders did not know what had struck them. Sure that their products were superior to Japanese "cheap mass production," they failed to recognize the single-minded determination of Japan's corporations to gain market share—a policy that took no prisoners. It was aimed at annihilating overseas competitors.

The United States had consented to the maintenance of the mobilized war economy in Japan because of the Cold War and the expansion of communism in Asia. The price had been high. The war economy, with its relentless orientation toward market-share expansion and disdain for profitability, could not fail to drive many American and European companies out of business. First in textiles, then in steel and shipping, one industrial sector after another was being usurped by the Japanese economic machine. The once-proud U.S. consumer electronics firm Zenith stopped producing radios in 1982. It is today owned by Korea's LG Electronics group.

Revaluation

Remedies were being discussed. The Ministry of Finance quietly began looking into a revaluation of the yen. But a group of internationally minded officials and intellectuals in Japan realized that the war economy system itself would have to be changed for America to get its way. Eventually, Japan would have to introduce freer markets and open itself up to imports, thus allowing foreign companies to sell their products in Japan. But these reformers were in a minority. A system that had been created during the war and which had become increasingly entrenched in the decades of postwar success was not dismantled easily. Vested interests had been created in the bureaucracy that thrived on the power provided by the licensing system, businesses that earned monopoly profits in closed domestic markets and politicians that received

support from the vested interests. Most of all, ordinary Japanese benefited from the wealth the system had created for them and distributed relatively equally. How could a general consensus be established that Japan needed to change?

The first doubts among the broader public about Japan's economic structure were sown in the mid-1970s. In many ways, this episode represented a test run of the much bigger and more far-reaching events of the 1980s and 1990s. It certainly provided an important learning and testing ground for key Bank of Japan officials.

Busting the Dollar Standard

From the early postwar years and until 1971, the major world currencies were pegged to the U.S. dollar. For Japan, the exchange rate was ¥360/$ (the figure said to have been chosen by U.S. banker Joseph Dodge after he learned that the name for the Japanese currency, *yen*, also meant "round" or "circular").[3] The U.S. dollar was in turn fixed to the gold price, and the U.S. Federal Reserve was officially obliged to convert dollars into gold on demand (to foreign treasuries or central banks).

As we saw in chapter 3, the dollar peg was convenient for the United States, because it enabled it to print more dollars that the world had to accept. In the 1960s, the Federal Reserve encouraged U.S. banks to step up credit creation. More and more dollars were created, and they spilled over as foreign investment. With these dollars, U.S. companies undertook large-scale purchases of European corporations—*"le défi Americain."*[4]

In 1971, when the French realized that the Americans printed money and bought up Europe, they called the United States' bluff. They took all those dollars that had been flooding into France and brought them to the United States, demanding that they be converted into gold. This was the famed French raid on Fort Knox. Of course there were not enough gold reserves. Consequently, in August 1971, in what is often called the "Nixon shock," the United States had to suspend the convertibility of dollars into gold. The fixed exchange rate system collapsed and the U.S. dollar fell sharply on world markets.

Japan was taken by surprise. The BoJ and MoF waited another ten days before abandoning the pegged exchange rate. During this time, the BoJ worked hard to keep the yen weak. To do so, it printed money aggressively, then went out and sold these yen to buy U.S. dollars in the foreign exchange markets. Its foreign exchange reserves jumped by U.S. $5 billion in the space of the single month of August. Then, the yen rose, triggering the short-lived Smithsonian Agreement, which fixed it at ¥308/$ in December 1971.

The BoJ continued to attempt to weaken the yen by creating purchasing power. It did this by buying up domestic assets, such as bonds, and paying

with newly created cash. Moreover, it felt that it needed to stimulate domestic demand sharply, because the sudden strengthening of the yen was going to hurt exports. So it also used its window guidance control mechanism to make banks create significantly more credit. What were at the time record amounts of liquidity were pumped into the economy.

In the end, the negative shock to exporters ended up being smaller than feared, because the yen had been greatly undervalued during the dollar peg system. Moreover, Japan's economic structure essentially remained closed to manufacturing imports. Most imports consisted of raw materials that were needed for processing and eventual reexporting. The strong yen made the raw material imports cheaper. All in all, the new exchange rate was not an insurmountable problem for exporters.

The First Bubble Economy

So it turned out that the monetary stimulus by the Bank of Japan was greatly overdone. Banks, struggling to meet the high window guidance loan quotas ordered by the Banking Department of the BoJ, virtually begged firms to borrow money from them. Already flush in liquidity and fully invested in productive projects, the firms used the bank loans to fund unproductive activities: They embarked on speculative land purchases. This happened at a time when Prime Minister Kakuei Tanaka's "Plan for Rebuilding the Archipelago" and the Industrial Relocation Promotion Law he had pushed through while still MITI minister encouraged construction. Given the policy incentives and the seemingly limitless liquidity from the banks, many companies joined the land rush. As the value of land as collateral rose, banks became even more eager to fund the growing land speculation. Land prices exploded in 1972 and 1973. Capital gains on land holdings produced substantial paper profits. That made the firms' stocks attractive. With excess credit creation spilling over into the stock market, a hitherto unprecedented stock boom occurred. The Nikkei 225 stock index rose from ¥3,000 in March 1972 to ¥5,000 by the end of 1972. Capital gains by firms were enormous: In 1972, land capital gains amounted to ¥15 trillion and stock gains to ¥5 trillion.

The BoJ-induced credit boom was so large that it began to spill over from asset markets into the real economy. As investment and consumption demand picked up, consumer prices and wholesale prices started to soar. A lot of money was chasing a limited amount of assets and goods. The excess money was heating up most markets. The craze for speculation spread to golf club memberships, art and antiques, jewelry, and rare coins.[5]

All this happened *before* the oil shock of November 1973. The sudden jump in oil prices did not assuage the situation (although it was mitigated by the strong yen). Triggered by the oil shock, a stampede on certain consumer sta-

ples followed. This sometimes reached hysterical proportions, such as with the legendary Osaka "toilet paper run." In 1974, the consumer price index rose 26 percent year-on-year (YoY) and the wholesale price index 37 percent. The crazy prices began to create social friction between those who owned land or had access to bank finance and those who did not.

It is often thought that the pre-oil-shock asset inflation was the result of Prime Minister Tanaka's stimulatory fiscal policy. However, as we have seen, fiscal policy can affect the economy only if it is monetized. Thus the monetization—in other words, the BoJ's credit policy—remains the key variable. The best test of this argument is a comparison of the early 1970s and the late 1990s. In both periods there was significant fiscal stimulation. Indeed, the fiscal stimulation of the mid- to late 1990s was far larger than the fiscal stimulation of the early 1970s. There is even the similarity of sharply rising oil prices, as between December 1998 and January 2000 oil prices almost tripled. Although Japan's dependence on oil has fallen, it is clear that this supply shock puts upward pressure on prices. Traditional theory makes us expect an inflationary boom in the late 1990s in Japan. However, during this time the largest deflation since the 1930s was recorded. This shows that we have missed a key variable. What is the main difference between these two time periods? It is neither fiscal policy nor oil prices, but the quantitative credit policy of the Bank of Japan.

The First Big Bust

By 1973, it had become clear that excess credit creation was being used merely for speculative land and asset transactions, thus pushing up asset prices. Urban land prices jumped by more than 50 percent from 1972 to 1974. Since these loans had been used speculatively, it was also clear that in aggregate, banks could not expect them to be paid back: only credit creation that is used for productive purposes can be paid back from the income streams the projects generate. Credit creation used for speculation must eventually turn into bad debts. That will hurt banks, which then reduce lending. As a result, economic activity falls and the economy moves into recession—a classic case of a bank-based boom/bust cycle.

Again, it was the Bank of Japan that acted as the catalyst for a turn in the business cycle through its key policy tool, window guidance. From the first quarter of 1973, it imposed tight window guidance loan growth ceilings. First, it reduced loan growth to the modest growth rate of 12.7 percent YoY. In the second quarter, it imposed a reduction of the loan increase quota compared to the same period a year earlier (by 16 percent). The tightening continued, with the window guidance loan increase quotas in the third quarter down by 24 percent YoY, in the fourth quarter down by 41 percent YoY, followed by a

stunning drop of 65.4 percent YoY in the first quarter of 1974.[6]

The tight credit controls lasted two full years, until early 1975. Bad debts began to pile up in the banking system. Many small firms that had exposed themselves too aggressively to real estate and housing loans in the boom years found that they were insolvent. As this became apparent, a number of shaky credit associations faced full-scale bank runs. The Ministry of Finance and the Bank of Japan were forced to dispatch officials to Aichi Prefecture to reassure residents that their deposits in the local credit union were secure.

As the banks became paralyzed by the bad debt, they reduced lending. Small firms were hurt first, but eventually the whole economy suffered, as total credit creation slowed and economic activity therefore had to decelerate. Business profits nose-dived, slumping 84 percent in 1975. Industrial production dropped 19 percent between late 1973 and early 1975. Inventories soared and capital expenditure shrank. Capacity utilization fell by 25 percent in 1975 compared to early 1973, leaving almost one-quarter of productive plant and equipment idle in 1975. Unemployment soared. The number of unemployed people rose to a postwar record by the end of the 1970s. Real GDP growth dropped precipitously from around 15 percent in the 1960s to virtually nil in 1974—and Japan sank into its biggest postwar recession.[7]

After high inflation, deflation became a problem: Prices started to fall in 1975. The Bank of Japan watched as its roller-coaster window guidance policy created the most severe postwar recession. The slump indeed marked the end of Japan's so-called high-growth period. Japan had enjoyed two decades of double-digit growth—the fastest-growing large economy in the world—but by 1974 growth had come to a screeching halt.

Mieno's Debut

The recession lasted longer and was more severe than had been anticipated. Despite a string of fiscal stimulus packages, such as in February, March, and June 1975, and a repeated reduction in interest rates, the economy did not respond. Increased public works spending and infusion of credit by the public Housing Loan Corporation in 1976 merely raised the fiscal deficit. With rising unemployment benefits, by early 1976, not only the private sector but also the public sector looked shaky.

In late 1976 industrial production finally recovered, and reached its previous peak levels of October 1973 again. Japan's worst postwar slump was ending. The reason? The necessary and sufficient condition for economic recovery had been an increase in credit growth. In late 1975 and early 1976 the Bank of Japan had raised its window guidance loan growth ceilings. Who was at the controls of the economy? The vice governor of the Bank of Japan was somebody called Haruo Maekawa. From April 1975 to February 1978, the

head of the Banking Department, in charge of implementing window guidance, was Yasushi Mieno.

Crisis Stimulus for Rethinking

When real GDP growth, after twenty years of almost continuous double-digit growth, suddenly contracted, it did not fail to trigger a lot of soul-searching. Many observers were puzzled about the relatively long and sharp downturn and began to see the Japanese economic structure as the main culprit. Indeed, in times of serious crisis, the system, whatever its form, is likely to be blamed for the crisis and voices are likely to call for significant changes. The slump spawned many studies at think tanks, including at MITI, which concluded that Japan would not be able to maintain the previous high economic growth rates based on its export orientation. Instead, it would have to revamp its economic structure.

Structural problems suddenly seemed a burning issue. There were a number of depressed industries in the manufacturing sector whose era seemed to have ended: shipping, petrochemicals, electric blast furnaces, soda, cardboard, and sugar refining. MITI advised that these be transferred overseas, into other parts of Asia. It recommended that Japan become a headquarters nation, overseeing factories in many countries, such as in Asia and America. The domestic economy needed to move up the ladder to higher-value-added sectors. Moreover, with the fiscal situation becoming critical, Japan's demographic problem was highlighted. Things looked bleak: a rapidly aging society with a pay-as-you-go pension system whose funds had been used up in vain attempts to stimulate the economy.

Calls for Japan to shift from export orientation toward expansion of domestic demand increased.[8] To boost consumption, however, the structural impediments that had reinforced the savings bias and anticonsumption environment needed to be changed. Japan's mobilized war economy had been focused on scale maximization in strategic, mainly export, industries. However, the quality of life and standard of living of the domestic population had been neglected. Living space, housing, and medical facilities needed to be created. It was at this time that the critique of the Japanese as "workaholics living in rabbit hutches" was heard overseas.

Recession Blamed on Japan's System

A whole list of problems with the Japanese economic system suddenly became apparent thanks to the crisis. In the early 1980s a contemporary wrote about the shock of the 1970s as follows: "It is undeniable that the existence of inefficient and often self-righteous public corporations, the expansion of subsidies to agriculture due to over-protective policies, the inefficient national

health care system, excessive administration intervention by the government in private enterprise, the proliferation of government-related institutions, an unclear division of responsibilities between the public and private sectors, and an unclear definition of the roles of the central government and local governments have combined to create swollen fiscal budgets and an enormous government bureaucracy."[9]

In the late 1970s, leading economists and public figures felt that "Japan is at an important crossroads now" and that "the time has come for a basic reexamination of public choices."[10] The so-called U.S.-Japan Wise Men's Group reported in 1981 that there was a need for Japan to make much greater efforts to open its domestic markets to the inflow of goods, services, and capital to a degree equal to that of the United States.[11]

Sakakibara's Debut

Thanks to the crisis, serious criticism of the bureaucracy, including the hitherto all-powerful and almost untouchable Ministry of Finance, was heard in public for the first time in the postwar era. More and more observers argued that the Japanese tradition of a "strong nationalist bureaucracy" was now an obstacle. Even former bureaucrats called for deregulation, administrative reforms and a reduction of the size of the bureaucracy.[12]

Two promising young Ministry of Finance officials, members of the small career-track elite, joined the increasingly outspoken and critical debate about the future of Japan's economic system. Both had taken time off from MoF for a stint in academia. One was Yukio Noguchi, who has ever since remained in academia, and the other is Eisuke Sakakibara, who subsequently rejoined the ministry and rose to become vice minister of finance in 1997. Twenty years before, in 1977, in a pathbreaking article ("Analysis of the MoF-BoJ Kingdom") in the highbrow magazine *Chūō Kōron*, Noguchi and Sakakibara were the first and only public figures to clearly identify and acknowledge the true nature of Japan's economic system. They called it the "wartime system for total economic mobilization."

Noguchi and Sakakibara correctly pointed out how the Japanese economy was far more market-oriented in the 1920s, how the control bureaucrats had introduced the postwar system during the war, and how this mobilized economy had remained fully in place in the postwar era. They also felt that this system could not continue to function with the current international environment. To them, the slump of the mid-1970s seemed evidence that the wartime system was "on the point of collapse."[13] "From our standpoint, the wartime system for total mobilization of economic resources is at last coming to an end, and from now on we must grapple with the real task of postwar reconstruction."[14] Not considering the possibility of a reform that might preserve some of the obvious advantages of the system, they instead called for a

fundamental transformation of Japan's economic, social, and political system in the image of the United States.

The reality was that this system was far too successful to be abandoned easily. It had created many beneficiaries, such as business groups, powerful bureaucrats, and intermediary politicians, but also including the majority of the Japanese population, whose living standards had risen rapidly. In the end, the deep shock of the 1970s was not big enough to be able to say good-bye to the war economy. Noguchi therefore had to repeat his "farewell to the war economy" nearly twenty years later.[15]

Credit Control Also Manipulates Public Opinion

The leaders at the Bank of Japan took note. They knew that the Bank of Japan was the only player that could create a recovery: Ministry of Finance policies to boost the economy were aimed at lowering the discount rate or fiscal stimulation. Neither could work so long as the Bank of Japan did not expand credit creation. Banks needed to be given money to write off their bad debts and clean up their balance sheets to be able to lend again. Meanwhile, the Bank of Japan, by acting as the banker to the country, could boost the economy by printing money. But as long as the BoJ failed to do this, the slump would continue.

By the 1970s, the BoJ's smoke screen concerning credit controls had been operating for a decade, and few observers, even at MoF, were aware of the real root cause and the crucial role of window guidance.[16] Neoclassical economics was beginning to make inroads in Japan, and the economics sections of the BoJ churned out papers showing that interest rates were the key monetary policy tool. Further, the BoJ was semiofficially following monetarism. Hence the BoJ's role remained obscured.[17] The public blamed MoF and the economic structure for the crisis.

Second Round Won

Visible elites can stay in power only as long as they deliver the goods. While Japan's economy was expanding at double-digit growth rates, people did not mind the strong grip on power by the government officials and especially the Ministry of Finance. The first and biggest postwar slump immediately triggered far-reaching critique of the mobilized economic system, including the legally most powerful bureaucracy, the Ministry of Finance.

Whether by accident or not, the decision makers at the Bank of Japan had won their second battle against MoF. When the BoJ finally let the economy recover in 1976, MoF was still licking its wounds. Yet the events of the 1970s were little more than a test run. It cannot be denied that the Bank of Japan had gained valuable experience in the mechanics of the creation and propagation of a real estate-based credit boom and the collapse that must follow.

8 Mysterious Money

The Ebb and Flow of the Yen

Hot Money

We have arrived in the 1980s: an era of financial deregulation in the industrialized countries, and one of globalization of the capital markets. The supervision of banking and securities industries was loosened, cartels in the financial sector were uprooted, and firms were exposed to heightened competition. Most industrialized countries lifted their restrictions on the movement of capital. As the international mobility of money increased, huge sums could be transferred between countries and between different kinds of assets in a split second.

Although the 1980s were also an era of booming international trade, the flow of goods and services was outclassed by the volume of rapidly expanding capital flows. During that decade the quantity of financial cross-border transactions reached a multiple of more than twenty times trade flows.[1] Foreign exchange transactions reached half a trillion dollars in a day.

The increased use of offshore financial centers free from regulation further amplified the volume of "hot money" that was chasing highest returns around the globe. Large-scale institutional investors grew in importance. Hedge funds, designed to make profits from market crashes, grew exponentially in size and began to dominate foreign exchange markets. Dealers, in front of keyboards and green monitors, had at their fingertips the execution of big-ticket international investment transactions that could affect countries in far-flung corners of the world. A switch in the beliefs of fund managers could send a torrent of money from one country to another, moving exchange rates and bond and stock markets worldwide. Or so it was said.

Japanese Money Flooded the World

Though it may have appeared as if most industrialized countries increased

their capital exports, in reality the money originated from only a few places. Since the 1970s, the top capital exporters, namely, the United States, Japan, Germany, France, Italy, United Kingdom, Canada, Holland, Denmark, Switzerland, and Saudi Arabia, had accounted for about 85 percent of all reported long-term international capital flows. But in 1987, 86.6 percent of the net capital exports of these countries were due to Japan alone.[2]

From the mid-1980s until the end of the decade, Japanese foreign investment all but dominated international capital flows. Only forty years after defeat in the Pacific War, Japan seemed to hold the key to international money flows. The "global" phenomenon of international capital flows was first and foremost a Japanese phenomenon.

Japanese long-term capital flows multiplied from a net inflow of more than $2 billion in 1980 to an outflow of nearly $10 billion in 1981. However, they literally exploded over the next four years, multiplying by a factor of almost seven to reach a historic $65 billion in 1985. Then, over the next year alone, they doubled again, blowing up to a massive $132 billion. In 1987 another record was set when a tide of $137 billion swept over the exchanges, followed by outflows of $ 131 billion the following year. In 1987 the net long-term capital outflows were almost twice as large as the already record-breaking current account surplus. This financial tsunami easily overtook even the OPEC surpluses of the 1970s.[3]

The money began to reshape the world in Japan's image. Outbidding or swallowing rivals, Japanese money bought financial and real assets all over the world. Japanese factories opened in greenfield sites in Scotland, Wales, and Northern England. Japanese cars were manufactured in the Midwest of the United States. Icons of U.S. business prowess, such as the Rockefeller Center, Columbia Pictures, and even Pebble Beach Golf Course, fell into Japanese hands. Japanese restaurants and hotels sprang up in the world's major cities to cater to Japan's corporate raiders. Hawaiian real estate came to be dominated by Japanese investors. The same happened in parts of California and the most attractive parts of Australia. Asia was stuffed with Japanese factories, turning into Japan's new sweatshop. It seemed that slowly but surely—perhaps not even that slowly—the world was coming to be owned by the Japanese.

This created fear and drew resentment. Labor unions in the United States started to mobilize their members against the Japanese threat. Economists developed strategies for the United States to avoid being completely owned by Japan. Some voices warned that Japan had lost the war but was now winning the peace by economic means.[4] Management gurus urged business leaders all over the world to adopt Japanese-style techniques as the last resort to withstand *le défi Japonais*.

Direct Investment Dwarfed by Portfolio Investment

Most analyses of Japanese money flows divide them into portfolio investment, which is "financial" investment, for instance, in government bonds, and foreign direct investment (FDI), which comprises purchases of "real" assets by foreigners, such as real estate and companies.[5] Japanese net foreign direct investment (FDI) rose from $2 billion in 1980 to $6 billion in 1985. Outflows then accelerated further: by the following year overseas direct investment had more than doubled to $14 billion and more than doubled again by 1988, reaching $34 billion. In 1989 and 1990 Japan's outflow of direct investment, at $45 billion and $46 billion respectively, was the largest in the world. By 1988 more than half of all FDI was directed at the United States and Europe.[6]

Though Japanese foreign direct investment reached historic proportions, until the late 1980s they made up only a small part of the long-term outflows, the greatest part being due to portfolio investments. Net portfolio outflows rose from $1.9 billion in 1983 to $23.6 billion in 1984—multiplying by a factor of twelve—and then more than quadrupled again in the following two years to peak at $101.4 billion.[7]

These remarkable developments could not fail to leave a strong impact on international securities markets. In the 1980s, international bond markets had become unthinkable without the ubiquitous Japanese presence. At their peak in 1986, 77 percent of total net portfolio outflows were directed into bonds, the rest into foreign stocks and shares. Almost 90 percent of investment in foreign securities was in U.S. Treasury bonds.[8] Japanese money mopped up a staggering 75 percent of all Treasury bonds auctioned off in 1986.[9] Portfolio flows peaked in 1986, while foreign direct investment rose steadily in importance. In 1990, at $48 billion, foreign direct investment had taken the lead over portfolio investment and Japan became the world's number one provider of direct investment.[10]

Actual Japanese Capital Outflows Were Even Larger

Despite the staggering sums, the actual extent of Japanese foreign acquisitions in the 1980s is still understated by the official figures. The true figures will probably never be known. The gap between data and reality did not open accidentally. Faced with criticism of both the trade surpluses and the large foreign acquisitions, the International Finance Bureau of the Ministry of Finance concocted a clever way of reducing both figures. The trick was to count capital outflows as imports of goods. Miraculously, both figures "improve" in one stroke. Such creative accounting was undertaken with items such as offshore gold accounts and aircraft leasing.[11]

In the mid-1980s, a gold rush seemed to have hit Japan. In the first half of the 1980s, Japan had already become the world's foremost importer of gold

bullion. In 1984, 192 tons of gold were shipped to Japan. In 1986 this had risen to almost 600 tons—making up half of the entire world production of gold by noncommunist countries.[12] This helped reduce the trade surpluses, because it boosted imports. It is not surprising, then, that the one-off import of 300 tons of gold to mint coins in celebration of the sixtieth anniversary of the late Emperor Hirohito's reign was booked through New York.[13]

Gold purchases were far larger than gold shipments, however. Much of the gold bought by Japanese investors never reached Japan. Trading houses offered to store "imported" gold in London in order to reduce transportation costs. Japanese securities houses aggressively pushed so-called gold savings accounts, which nominally constituted gold investments—and hence gold imports. However, the gold "purchases" were conducted on paper only and gold never physically moved from the foreign countries involved. But on a balance-of-payments basis such investments were counted as imports to Japan. In 1990 this capital outflow reached about $6 billion.[14] The authorities' liberalization of gold transactions in 1982 had set off the process. MoF also gave the licenses for the gold accounts, and it ordered the memorial gold coins.[15] None of these capital outflows was listed in the capital account. Instead, they lowered the trade surplus by that much.

Some other ways to artificially reduce the trade surplus had been well tested in the past. In the late 1970s, when Japan's current account surplus had already produced trade friction with other countries, a scheme dubbed the "samurai plan" was devised by MITI and some of Japan's top banks, and was later supported by the Ministry of Finance.[16] This scheme would allow cosmetic changes of the current account surplus. When foreign parties wanted to buy big-ticket items, such as aircraft, from other foreign parties, Japanese banks would step in, buy the item, and lease it to the one who wanted it. The Ministry of Finance would provide the foreign exchange reserves to the government-owned Export-Import Bank, which would finance the deals. Both Japanese commercial banks and the lessor would make sizable profits from this taxpayer-financed transaction.

Whenever an airline bought aircraft from a foreign manufacturer, Japan's government could potentially use it to reduce the recorded current account surplus, as the transaction would appear to be an import to Japan. It was crucial, though, to maintain the legal fiction that the lease was only temporary, since normally financing leases would not count as imports. In 1979, MITI thought that the scheme was a "trump card in reducing the surpluses" by an estimated $800 million in fiscal 1979 alone.[17] The Ministry of Finance, worried that the IMF might see through the scheme, called it off after a year. However, in the 1980s, with the trade surplus ballooning again, a more sophisticated version of the leasing scheme, involving overseas subsidiaries of Japanese firms and banks, was finally implemented. Japan became a major player in

the international aircraft leasing market, with the biggest aircraft-leasing firm fully owned by a Japanese company.

In addition to these misrepresentations of capital outflows, many capital exports took place that are not recorded at all: The size of the "errors and omissions" item in the Japanese balance of payments was often larger than the entire current account surplus. In 1989 in Japan, capital outflows amounting to ¥3 trillion were unaccounted for and listed in the balance of payments as "errors and omissions." That was almost half the size of the officially registered net long-term capital outflow of ¥6.6 trillion.[18] At the time the IMF warned that international statistics on international capital flows have become so patchy that "it has become difficult to ascertain each country's true capital (or current) account position and, therefore, how much saving the country has been providing to, or absorbing from, the rest of the world."[19]

Many acquisitions by Japanese companies were not measured by the balance of payments at all. One way of evasion is to finance them via Japanese bank subsidiaries in London or New York. The bank sends the money from its Tokyo head office to foreign affiliates as an "interoffice transfer," which is not recorded as long-term capital export in the balance-of-payments statistics. Better still would be to send the money abroad as an interoffice transfer and then reimport it as official capital inflow. As a result, the officially recorded long-term capital outflows will appear that much smaller. Precisely such a scheme was introduced in the 1980s, when Japanese banks offered so-called impact loans to domestic customers. Under this system, a Japanese borrower took out a dollar loan. That was immediately swapped into yen, rendering it a normal yen loan for the borrower. But the loans were booked through offshore centers and then counted as long-term capital imports in the balance-of-payments statistics. In other words, a domestic transaction (a yen loan) was booked in such a way that it would appear as a capital import in the statistics and would therefore reduce the total net capital export figures of the Japanese balance of payments.[20]

The Mystery of Japanese Money

Although the precise figures may never be known, the officially published figures of Japanese foreign investment were already large enough to worry many observers, not least because they seemed to defy economic logic. In the 1970s, Japanese capital flows followed the textbooks: They were roughly equal in size to Japan's trade or current account surplus. Thus money earned from Japanese net exports was merely "recycled" back abroad as foreign investment. Trade movements appeared to be the driving force, to which capital flows adjusted.

In the 1980s, this textbook scenario had disappeared. Now the momentum did not originate in the current account. Long-term capital outflows preceded

the current account surplus in timing and by far exceeded it in size. Japan was purchasing far more assets abroad than it could afford due to its exports. To fund its international shopping spree in the 1980s, Japan actually had to borrow foreign currency.[21]

Economists had a hard time explaining this phenomenon. Some thought that the abolition of capital controls must have been responsible. Indeed, legal regulations were eased gradually over the 1980s, with benchmark changes of the foreign exchange law in 1980. However, most large institutional investors stayed well below their legal foreign investment limits in the second half of the 1980s.[22] Moreover, the question remained why investors suddenly chose to invest so much abroad. Another frequently cited explanation was that Japan's capital exports were due to Japan's high national savings. But this ex post facto accounting identity does not tell us anything about *why* Japan's savings were so large.

In their empirical work, most researchers disaggregated long-term capital flow figures into portfolio investment and foreign direct investment and then tried to build models that could explain them separately. The main model explaining portfolio investments was based on standard portfolio diversification: Investors are assumed to reduce risk by holding a diversified portfolio. The model can be tested by checking whether the information available on asset returns (in Japan as compared to the rest of the world) is sufficient to explain the actual investment pattern. In practice, this boiled down to checking whether the differential between Japanese and foreign interest rates could explain Japanese capital flows.

Unfortunately, these models failed to explain Japanese portfolio investment.[23] When the interest differential did not move much, Japanese foreign investment increased. Even when the relative returns moved against foreign investment, Japanese money continued to flow out. That was particularly puzzling when the yen rose significantly in the mid- 1980s, for it meant that Japanese investors lost money over a protracted time period, as foreign investments lost their value in terms of the yen.[24] In the two years between January 1985 and January 1987, approximately 40 percent of the cumulative value of Japanese overseas investment had been wiped out in yen terms. Despite this, Japanese investors continued to invest in sizable amounts in U.S. and other foreign assets. This anomaly persisted over several years despite the fact that the intention of the Plaza Agreement—namely, to strengthen the yen—was not in doubt.

It had to be admitted that serious studies of Japanese foreign investment "have not been particularly successful in explaining the rapid growth of capital outflows" and many a report ended with the words that Japanese foreign investment was "hard to understand," "counterintuitive," or "something of a mystery."[25] The dramatic surge of Japanese foreign investment remained an enigma for the experts.

Reversal of the Tide

Economic models of Japanese foreign investment focused on the period of rapidly rising foreign investment. They failed to explain them and were even more helpless in explaining the events of the 1990s. In 1991, as the Japanese current account was heading for new record surpluses, topping $90 billion, net long-term capital outflows had suddenly vanished. Japan recorded $40 billion worth of net inflows of long-term capital, the first in more than a decade. Japanese investors became net sellers of foreign securities in record figures.[26] Japan remained a net seller of foreign assets throughout 1991. From manufacturers to banks and real estate firms, Japanese money was suddenly retreating on all fronts.[27]

With increasing losses on their foreign investments, it had become apparent even to the last believers in the "profit motive" that Japanese corporations, and in particular the country's financial institutions, had not invested for profits. There were hardly any profits. As it turned out, even giants had not bothered to conduct cash-flow analyses and profit projections about their numerous foreign acquisitions.[28]

Researchers struggled to explain the puzzling aberration of a record current account surplus accompanied by a sizable long-term capital account surplus. Standard analyses failed to provide an explanation of the extraordinary movements of Japanese foreign investment in the 1980s and the early 1990s. This gap in the economic understanding of the world could be excused if it concerned the capital account behavior of, for instance, the Principality of Liechtenstein. But the lack of understanding of the determinants of capital movements of the biggest capital exporter in history, whose money has directly affected companies, governments, and lives in many countries all over the world over a period of more than a decade, should not be excused easily. It is well worth researching what was behind these dramatic events.[29]

The Great Yen Illusion

Credit Bubble and Bust

Mysterious Land Prices

In the 1980s, Japanese capital outflows were not the only phenomenon that puzzled economists. From the mid-1980s onward, land and stock prices appreciated tremendously. Between January 1985 and December 1989, stocks rose 240 percent and land prices 245 percent. In many countries, land prices tend to appreciate in line with GDP growth, thus leaving the ratio of land values to GDP around 1. In the United States it was as low as 0.7 in 1989. But in Japan it had risen to 5.2.[1] By that time, real estate prices had reached unprecedented levels. Using market values, one could calculate that the value of the garden surrounding the Imperial Palace in central Tokyo was worth as much as all the land of the entire state of California. Although Japan is only l/26th of the size of the United States, its land was valued four times as high. The market value of a single one of Tokyo's twenty-three districts, the central Chiyoda ward, exceeded the value of the whole of Canada.

Such figures should have told us that something was wrong. But economists are trained to believe in "market outcomes." So they tried to justify the extraordinarily high land prices. Some thought land scarcity was the reason. But even in crowded Tokyo, the ratio of available office space to the total land surface was merely 40 percent at the peak. Rather than being scarce, land was being used inefficiently.[2] Almost two-thirds of Japan's population is concentrated in the six major cities, where land prices are high, while land in sparsely populated provincial areas, remote from the six cities, is relatively inexpensive.

Another favorite explanation for the high real estate prices was that the productivity of land was simply extremely high. If that was true, it should have been reflected in rents. But rents failed to appreciate as much as land prices. In the late 1980s, residential land prices in Tokyo were up to 100 times higher than in New York City. Rents were only four times New York's levels. Calculating the theoretical value of land based on rents, and taking interest rates and

other variables into account, economists conceded that market prices were far above the prices that economic theory predicted.[3] Land prices remained a puzzle to the experts.

Speculation

The answer to the puzzle could be found by asking one of those involved in the land-buying binge of the late 1980s. One would have soon found that they did not acquire land to earn money from renting out office space. Their main aim was to make a quick buck by selling the land soon after. To them, land was simply an asset—one that was about to appreciate further.

The same forces seemed to be propelling stock prices to dizzying levels. From 1984 to 1989, the Nikkei 225 stock index rose on average by 30 percent per annum. In December 1989, it peaked at an all-time high of ¥38,915. Just as with land prices, share prices had risen far above what economic models could explain, for instance by corporate profits. The ratio of share prices to corporate earnings doubled in those five years from 35 to 70. The expected income stream from owning a part of the company could no longer explain the stock price. Studies used a variety of explanations, such as low interest rates, to make sense of such stock prices. But they all concluded that stock prices could not be explained by standard theories.[4] Somewhat embarrassed, one major study suggested that stock prices could, at best, be explained by rising land prices. Companies who owned land were valued higher as land prices rose. But that left us none the wiser, as land prices had remained an enigma.

Free Money

Companies didn't mind if experts could not explain asset prices. They ran to the punch bowl while the party lasted. Firms borrowed money and invested. Or they issued new stock or corporate bonds. Little of that was invested productively. Most went straight back into stocks or real estate. With asset prices rising, even staid manufacturers could not resist the temptation to try their hand at playing the markets. They initially entrusted substantial sums to their stockbrokers, who had set up so-called tokkin accounts in which they engaged in discretionary speculative investments in the financial markets. Soon they expanded their finance and treasury divisions to handle the speculation themselves. The frenzy reached such proportions that many leading manufacturers, such as the carmaker Nissan, made more money through speculative investments than through their core manufacturing business.[5]

Laymen wondered how this could be possible. Too difficult to explain, the experts said. It was financial technology. The increased sophistication of financial markets had delivered the wonders of zai-tech.[6] Many firms felt there

was no time to ask questions; time was money. So they joined in setting up *zai-tech* operations—subsidiaries devoted to full-time speculation. Firms set up real estate subsidiaries, banks set up nonbank financial firms to lend to real estate firms, and individuals mortgaged their land to get into the game. And all were buying land and stocks.

Economic Boom

Not all the hot money gushing around the economy in the late 1980s was used for pure speculation. Substantial amounts found their way into corporate investment programs. Firms were finally able to implement all those projects that lack of money had forced them to shelve. They now splashed out. New factories were rolled out on greenfield sites in Japan and overseas. The latest machinery equipment was ordered and a generation of production facilities upgraded. Shiny new marble-clad corporate headquarters rose in Tokyo's posh business districts. Luxurious employee residences were built in the suburbs, and glitzy resort facilities with tennis and golf courses for corporate entertainment sprang up by the sea and in the mountains. Tokyo Bay was filled up by land reclamation projects. Real estate firms competed to construct the tallest building in the world.

Aggregate investment soared, leading Japan on one of the biggest capital expenditure sprees in peacetime history. Between 1985 and 1989, ¥303 trillion worth of capital investment took place.[7] Each year, Japan on average invested an amount equivalent to the entire GDP of France.[8] Corporate expense accounts ballooned as managers entertained each other lavishly and spent fortunes on corporate golf club memberships. Like the Nikkei index, the index for golf club memberships had become a widely watched barometer of the state of financial markets, and it only pointed one way: up.

As companies aggressively hired employees, the labor market boomed—so much so that there was a general fear of a serious labor shortage. Companies started to invite final-year university students on expensive trips to holiday resorts to entice them to sign up and get them away from other companies. Unemployment hit a record low of 2 percent in March 1990. With such a tight labor market, personal incomes rose and consumption expenditures grew strongly. Hence nominal GDP, which consists of consumption, investment in plants and equipment, government spending, and net exports, was pushed up to a growth rate of 5.5 percent on average from 1986 to 1990.[9] Factories operated at maximum capacity utilization.

More Mysteries

Yet despite the high growth rate and tight labor market, inflation, as measured by the consumer price index, remained surprisingly low. In 1987 and 1988,

the problem appeared to be deflation, as the consumer price index actually dropped. Japan's economic miracle seemed to deliver just the right amount of growth for everyone to be happy and inflation to remain subdued.

A "new era" had dawned in Tokyo. Japan's economic performance in the 1980s attracted many admirers. Literally thousands of articles were written about the Japanese "new" miracle economy, and theories abounded as to just how Japan managed to succeed so brilliantly while other countries had problems with long-term unemployment and inflation. A common explanation by economists was that high and rising productivity explained the impressive performance of Japan's economy.

The Breakdown of the Monetary Model

It should have worried observers that economists failed to explain any of the unusual developments of the 1980s in Japan. Economists were puzzled to find that they could not even explain Japanese GDP growth. Until then, economists had believed they had a good grip on what determines GDP growth. Although there are many theories in modern macroeconomics about the economy (classical/neoclassical, Keynesian, monetarist, and fiscalist, to name the most important ones), they are all based on the fundamental relationship between money and the economy. They all assume that the money supply is proportional to nominal GDP. Economist Milton Friedman even called this relationship the most stable in economics, with its reliability approaching that of a law of the physical sciences.[10]

That science was in trouble. In the Japan of the 1980s, the links between the so-called money supply measures, such as Ml or M2, and economic activity had broken down. GDP and money supply did not grow in line with each other. Money supply growth exceeded GDP growth. The "velocity" was not constant anymore, which implied that the "demand function for money" had broken down. This meant that something was seriously wrong with all of modern economics—whether classical, Keynesian, or monetarist—for all varieties relied on the stable relationship between the money supply and GDP.

The problem was also a practical one. With money and GDP parting ways, monetary policy, the main tool to influence the economy, had lost its effectiveness. If economic growth was not linked to the money supply anymore, then manipulating money could not produce the desired target GDP growth rate.

Things got worse. The most popular explanatory variable in economic models, the interest rate, failed to explain economic growth or asset prices. It is often said that the low official discount rate of 2.5 percent, maintained from February 1987 to May 1989, was the cause of the bubble. But interest rates were also not in any stable relationship with asset prices or economic growth.

Japan had troubled economists for a while. It seemed to defeat the cherished tenet of classical economics that only free markets could lead to eco-

nomic success. Japan was obviously full of regulations, cartels, and other obstacles to trade and competition. According to classical economics, it should have been an economic disaster zone.[11] Yet Japan's economic growth was so high in the postwar era that it was called a "miracle." This high growth seemed to recur in the 1980s. Asset prices, GDP, and capital flows all moved in ways that models could not explain. Economists could not make head or tail of Japan's strange economy.

Revenge of the Nerds

However, the "Goldilocks" "new economy" did not last. Economists were startled again when asset prices tumbled from 1990 onward. Between January 1990 and December 1994, stock and land prices halved. Many companies and individuals who had borrowed money to purchase land speculatively found themselves unable to service their debts, let alone repay the principal. Corporate and individual bankruptcies soared to postwar highs. Japanese investors pulled out of their overseas investments in a stampede. Previously unheard of, several Japanese banks and securities firms became insolvent. The boom of the 1980s turned into the bust of the 1990s, the biggest economic slump since the 1930s.

Some economists seemed relieved. The downturn was evidence that, after all, Japan's economic system was not so successful. What had previously been praised about Japan—the close ties between the government and the private sector, the monitoring by main banks, the family-style corporate system—were suddenly nothing but cronyism, corruption, and lack of transparency. The system was quickly blamed for the recession. Both inside and outside Japan, voices began to call for a reformation of the Japanese economic structure, as already happened in the 1970s. However, this time the voices did not recede for a decade.

Money Is the Answer

Japan's structure is not responsible for the bubble of the 1980s or the slump of the 1990s. Traditional theories could not explain Japanese asset prices, because they neglected the role of credit creation. From about 1986 onward, banks increased credit creation aggressively. Loan growth of the city banks averaged about 15 percent in the late 1980s, and total loan growth remained above 12 percent most of the time. Meanwhile, the ability of the economy to service these loans—national income—only grew about half as fast.[12] It was a classic case of unproductive excess credit creation: money was produced by the banking system but not used productively. Instead, it was used for speculation or conspicuous consumption.

As more money was created out of nothing and injected into the real estate market to buy land, demand for land rose. Since the supply of land is fixed,

land prices had to rise. This created capital gains for the speculators. And that attracted even more speculation.[13]

Seemingly Safe and Sound

The rising land prices further encouraged the bankers to lend. Especially since the banking crisis of 1927, the Japanese banking system has relied on collateral, and this has almost always meant land collateral.[14] Large firms belonging to the same business groups as the banks could receive loans without security. But the majority of borrowers could obtain loans only if they could also put up land as collateral. In that case, banks hardly cared to ask what the loans would be used for. The alternative method, widespread in the United States, was to calculate the expected cash flow of the proposed investment project. However, Japanese banks considered the cash flow projection method too risky. How could bankers assess correctly how many goods a company would be able to sell?

Banks preferred the collateral method, as it was simple. The loan officers checked the annually published official land prices of each area, the *rosenka*, and then lent up to 70 percent of this market value. The 70 percent rule was imposed on banks by the Ministry of Finance, which wanted to provide a safety margin. Even if land prices dropped by 30 percent, there would be enough collateral to cover the entire loan.[15]

The land collateral principle fitted into the designs of the policymakers who were directing credit toward strategic industries and did not want consumers to be able to borrow money. Most land holdings in the big cities have been in the hands of large firms, and this helped them raise funds. As city center land prices soared, companies were assured of an ever-increasing flow of liquidity from banks. Throughout the postwar era, land had therefore been a pillar of the Japanese financial system.

Land prices climbed steadily for much of the postwar era. There were interruptions, such as after the bubble of the early 1970s, when land prices dropped. But to the generation of loan officers on the job in the mid-1980s, it seemed as if land prices could not fall. Many economists encouraged them in this view, arguing that demand for land was likely to rise: In the 1980s, *globalization* and *internationalization* were key buzzwords and foreign financial institutions expanded their operations in Tokyo. They needed office space. Moreover, as the speculative frenzy took off and more financial firms were founded, demand for land in central business districts was boosted. Since most forecasters simply project current trends into the future, real estate analysts predicted a continued rise of land prices right into the next century.

A classic bubble had developed: Rising prices led to further investments, which pushed up prices even more. However, it was not based on economic

fundamentals. Like all bubbles, it was simply fueled by the rapid creation of new money by the banking system.

The Fallacy of Composition, Again

Individual loan officers could hardly have seen the danger: They considered land prices as a given variable, one they could not hope to influence. Thus they extended loans on the basis of it. But as all other loan officers did the same and stepped up lending for real estate purchases, land prices were driven up. Banks, therefore, suffered from the fallacy of composition. Each bank considered land as safe collateral without realizing that the collective action of banks was driving up land prices and hence was far from safe, depending on ever-rising bank loans to fuel real estate speculation. Consequently, banks systematically underestimated credit risk. Each bank thought that its real estate loans were safe. However, as soon as the total supply of loans for real estate transactions fell, so would land prices.[16]

The share of total outstanding bank loans that was accounted for by real estate speculation is striking. By the end of 1989, real estate loans had reached 12 percent of total loans of all banks. However, loans to the construction sector were equally used for real estate speculation, accounting for another 5.4 percent of total outstanding loans. Further, many companies and banks had set up nonbank financial institutions that borrowed money from banks and then lent it to real estate speculators (another 10 percent of total loans). In total, "bubble" loans already summed up to 27 percent of total loans, an absolute sum of ¥98.9 trillion or 25 percent of 1989 nominal GDP. In the late 1970s, the share of these three "bubble" sectors was only 15 percent, or 9.9 percent of nominal GDP.[17]

In reality, there was more. Many loans officially classified as lending for other purposes were in actual fact diverted to real estate speculation. "Service sector" loans, for instance, soared in the late 1980s, and many were used for speculative investments. Even some of the straight "manufacturing" loans, officially used for operations or plant and equipment investment, had in actual fact found their way into *zai-tech* speculative investments. This meant that far more than a third of total credit creation had been used for wasteful purposes, instead of productive investments.[18]

Easy Money

Normally, banks choose clients from among a large number of loan applicants, turning down a significant percentage. From 1986 to 1987, banks were liberal in their lending attitude. But from 1987 onward, the tables had turned: It was the bankers who were aggressively pursuing potential customers. After large-scale borrowers had already borrowed as much as they wanted, the

banks actively courted even small real estate and property development firms in an attempt to drum up more borrowers. Banks competed fiercely against each other to expand their loan books.

When banks become keen to expand their loan books, they may not be able to do much to increase productive credit creation. That is determined by the fundamentals of the economy, namely, the quantity of factor inputs (land, labor, capital, technology) and the quality of their use (productivity). But banks can increase unproductive credit creation almost at will. All they need to do is give borrowers the prospect of substantial capital gains. This can be done by focusing on collateralized loans—loans where an asset class, such as land or stocks, is used as a rationing and credit allocation device. By raising the ratio of the loan value to the valuation of the land, banks attract more borrowers who think they can make a profit. As the banks raise the appraisal value of collateral, its price is pushed up, thus providing capital gains to the borrowers and rendering their investment profitable. Both banks and borrowers feel encouraged to engage in further such activities, and as word gets around, more and more individuals and companies want to join the game.[19]

This is what the loan officers at Japan's banks did in the late 1980s. Instead of the current *rosenka* land values, loan officers anticipated the land value of the next year—for instance, by assuming the repetition of the price increase from the previous year. So while the official loan/valuation ratio stayed at 70 percent, their "estimate" of the valuation had risen such that borrowers could receive 100 percent or more of the current market value of land collateral. Soon even this was not enough. Loan officers started to employ the estimated land value two years on. Banks made increasingly exaggerated assessments of the land value, so that the actual ratio of land value to loan often jumped to 300 percent or more.[20]

Anecdotes abound about how banks were soliciting loans at bargain interest rates, pursuing clients like street peddlers. For instance, the owner of a small real estate development company reported how in late 1987 he had been visited by a branch manager of a major city bank with which he had previously had no business dealings. The branch manager did not just offer his services, but literally urged the man to borrow money from the bank. Whatever interest rate he wished to pay, the bank would agree to, he was assured. "Please, just borrow money, and don't even think about the interest rate and payment schedule," the branch manager told him. When the business owner retorted that he did not need money, the branch manager pulled out information about a specific real estate project that had been identified by bank staff. The branch manager explained that there was a piece of real estate in a shopping area of Tokyo that could be bought for ¥600 million. Since the banks had to stick to the 70 percent loan/collateral value ratio, they could normally only have lent ¥420 million to purchase this plot. But the bank drew up a sales

contract for ¥1.1 billion for the piece of property concerned. Based on this contract, the bank then extended a loan over ¥770 million to the real estate developer. While the 70 percent loan valuation ratio was apparently maintained, in actual fact it was far beyond 100 percent.[21]

There are other documented cases where bank loan officers, pressed hard by their superiors to extend more loans, actively searched for potential borrowers and offered to generously fund the speculative purchase of a piece of land—already chosen and its value "estimated" by the loan officer—with "guaranteed" capital gain.

Banks quite clearly were desperate to get rid of their money. To the layman, this was a strange phenomenon. People soon dubbed it *"kane amari"* (excess money). Only economists, analysts, and those working in the financial markets or for real estate firms knew better. They dismissed such a simplistic analysis. Land prices were going up due to far more complicated reasons than just excess money, they claimed. Ordinary people simply did not understand the intricacies of advanced financial technology. The experts, who had studied finance and economics at university, knew that market prices were always right and therefore land prices were justified.

The Classic Credit Bubble

The ordinary man in the street turned out to be wiser than the experts. *Kane amari* was an accurate description of what was going on. Banks gave out too many loans and hence created too much money. The money was not mainly used for consumption; thus consumer prices remained modest. It was used for financial transactions, thus creating asset price rises—asset inflation, or what is now called the "bubble."

Just as in the early 1970s, individual banks did not recognize that they were collectively pushing up land prices. It was the same process that fueled the real estate boom in Scandinavia in the 1980s. It also fueled the mortgage lending and house price boom in the United States and United Kingdom in the 1980s. The same process also created the "golden twenties": In the 1920s, U.S. banks lent with stocks as collateral. The principle remained the same. As each bank took the stock price as given, it created new money for stock transactions. With more money in the stock market, stock prices had to rise. Each bank thought it was safe accepting a certain percentage of the value of the stock as collateral, but the actions of all banks together drove up the overall market. More and more money was created. The same bank-driven credit boom was at work in the 1990s in Korea, Thailand, Indonesia, Malaysia, and, of course, also the United States. It is invariably the same story. And what happens after a credit boom is also always the same: a credit bust, a banking or financial crisis with scandals, and a recession.

Disaster Looms When Debt Rises Faster than Income

Bank loans can be called the borrowing of the nation. The ability to service loans depends on income generation. That is GDP growth. The visible problem was that in the late 1980s, Japanese bank loans grew by double digits, while nominal GDP rose by no more than 6 percent.[22] Loan growth in excess of GDP growth is one approximation of unproductive credit creation. All this money was not used to create more national output, but to play the land and stock markets, creating nothing but debt. Given the extent of credit creation, it was not difficult to conclude that Japan was heading for disaster. Whether one considers an individual, a company, or a country, if total borrowing rises faster than income is growing, at one stage the borrower will not be able to pay back all those loans.

Asset prices rise only as long as new money enters the market. All it takes to burst a credit-driven asset bubble is for loan growth to slow. Then the whole credit pyramid must collapse like a house of cards. Asset prices would fall. That would leave many speculators heavily exposed, for they need asset price rises to service their loans, let alone repay them. Thus they are forced to sell the asset. As more speculators sell, asset prices fall. More speculative borrowing schemes unravel. Many speculators are driven into bankruptcy. That creates large bad debts for the banks. In aggregate, it is easy to estimate the ultimate scale of the problem: When the bubble bursts, all the speculative lending must turn into bad debts.

Bust: The Story of the 1990s

This, of course, is precisely what happened in the 1990s in Japan. In mid-1989, banks suddenly restricted loan growth. Half a year later, stock prices peaked. Then land prices stopped rising. As no more newly created money entered the asset markets, asset prices could not rise further. Speculators had to cover their positions and started to sell. In 1990 alone, the stock market, as measured by the Nikkei 225 index, dropped a precipitous 32 percent. Land prices also started their sharp decline. Some highly speculative plots of land in commercial districts saw their "market value" drop by 80 percent or more. More and more real estate speculators became "distressed." As they went bankrupt, banks got their first taste of bad debts in decades. They realized that the problem could easily escalate. So they became cautious. Very cautious. They drastically reduced the amount of new loans to real estate, construction, and nonbank financial firms. This, however, had to push asset prices further down, because less and less new money was coming into the market. So bankruptcies rose.

As banks began to realize the enormous scale of potential bad debt—the majority of the ¥99 trillion in "bubble" loans were likely to turn sour—they

became so fearful that they not only stopped lending to speculators, but also began to restrict loans to manufacturing firms that had nothing to do with the bubble.

The Credit Crunch

The Japanese wartime and postwar corporate system with its subcontracting relationships is built like a corporate hierarchy, with a small number of large firms at the top and a large number of small firms at the bottom of the food chain. The small and medium-sized firms are too small to issue corporate bonds and are therefore entirely dependent on bank loans for their external funding. Not surprisingly, they have remained the biggest customers of the banks, despite the inroads made by speculators in the 1980s. The snag is that lending to small firms is always riskier than lending to large firms. So in the early 1990s, when banks became burdened with bad debts and more averse to risk of default, they reduced their lending to small firms. From 1992 onward, small firms suffered from a credit crunch.[23]

The implications for the economy were enormous: Small firms are Japan's number one employer, accounting for 70 percent of total employment. The impact was immediate, because small firms never had the luxury of lifetime employment and seniority pay. These structures had been reserved by the war economy bureaucrats for the larger firms. In recessions the small firms quickly reduce bonuses and pay, and they lay off staff. Since they are the main employer in Japan, actual unemployment started to rise from 1992 and disposable incomes dropped. As employees of small firms quite rightly started to worry about their jobs, they spent less and saved more. As consumption slumped, companies could sell fewer of their products. Yet they had just finished new factories and expanded their production capacities. Inventories of unsold goods piled up. Prices were driven down. Even the large firms had to start cost-cutting measures. Labor markets worsened further. In short, Japan was in a full-blown recession.

That was predictable. With paralyzed banks reducing loan growth, total credit creation in the economy shrank. Less purchasing power was available. Consequently, GDP growth had to slow drastically. Thus, from 1991 onward, Japan's economy slid into the longest and deepest postwar recession since the 1930s. Unemployment soared to postwar records. Probably more than five million Japanese lost their jobs and did not find employment elsewhere.

Again, most economists were puzzled. They had not predicted an economic slump. To the contrary, as the official discount rate was reduced (nine times altogether since 1991), they predicted an economic recovery, believing that interest rates were a good predictor of economic growth. When this author warned in late 1991 that Japanese banks would be driven to the brink of

bankruptcy and a massive credit crunch would produce a major recession, the established experts dismissed the prediction.[24] How could Japan, which was seemingly taking over the world, whose exports had conquered global market shares, and whose money was buying up assets around the earth, suddenly fall into a full-blown recession?

The recession also lasted longer than expected, for the simple reason that economic growth takes place only when there is more credit creation. Falling interest rates did not help as long as credit creation remained small. Yet as late as 1993 and 1994, most economists in Tokyo denied that there was a credit crunch. Their theories simply did not include credit creation, the very process that is at the heart of every economy.

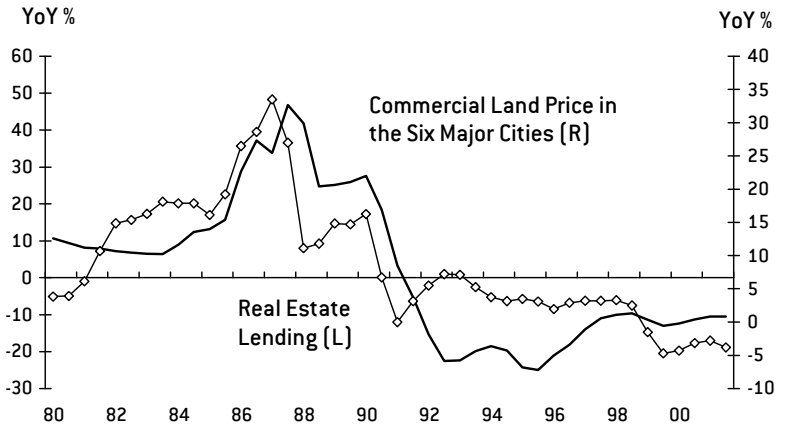
Mysteries Solved by Credit

Credit variables tell a simple story. Figure 9.1 shows bank lending to the real estate sector and land prices. As can be seen, there is a high correlation (which is also confirmed by statistical tests).[25] Credit also explains why the traditional money supply measures did not have much of a link with GDP anymore. Money was increasingly used for transactions that are not part of GDP at all, namely, speculative financial and real estate transactions. We should expect nominal GDP growth to be closely correlated only with that part of credit creation that was used for GDP transactions. In other words, we should expect total loans minus the three bubble sectors—real estate, construction, and nonbank financial institutions—to be closely correlated to nominal GDP growth. Figure 9.2 shows that this is indeed the case. Our index for GDP-based credit creation explains not only the boom years of the 1980s but also the sharp collapse in GDP growth from 1991 onward.[26]

Finally, our credit model also explains the mystery of Japanese foreign investment that swept across the world in the 1980s and collapsed in 1991: Japan simply printed money and bought the world.

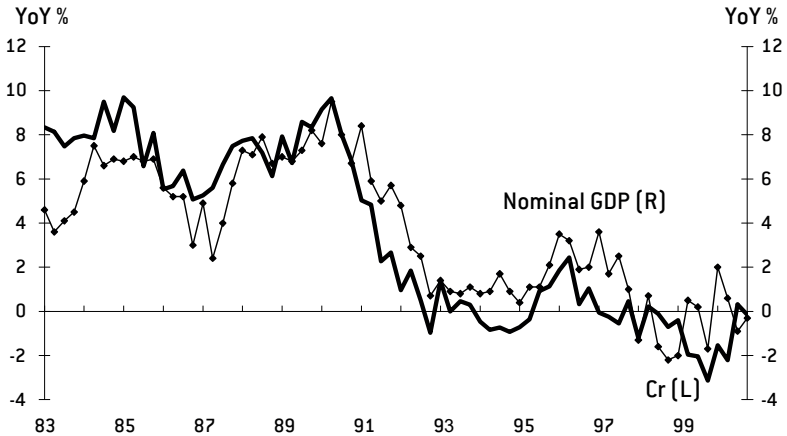
While it is illegal for individuals to print money and go on a shopping spree, central banks have a license to print as much as they wish. Yet it is not easy for a country to just print money and then go shopping all over the world. To buy foreign assets, domestic currency must be converted. Under flexible exchanges, foreign exchange dealers would observe unusually strong demand for the foreign currency—say, the U.S. dollar—and a large supply of the currency of the country concerned. This would immediately affect exchange rates. In addition, foreign exchange dealers keep an eye on key economic indicators of the countries whose currency they deal in. If there was high inflation in a country, this would be seen as evidence that the central bank was printing too much money. So the value of that currency would fall.

Figure 9.1 **Bank Lending to the Real Estate Sector and Land Prices**



Source: Japan Real Estate Institute; Bank of Japan

Figure 9.2 **Credit Creation Used for GDP Transactions and Nominal GDP in Japan**



Source: Economic and Social Research Institute; Cabinet Office, Government of Japan, Bank of Japan

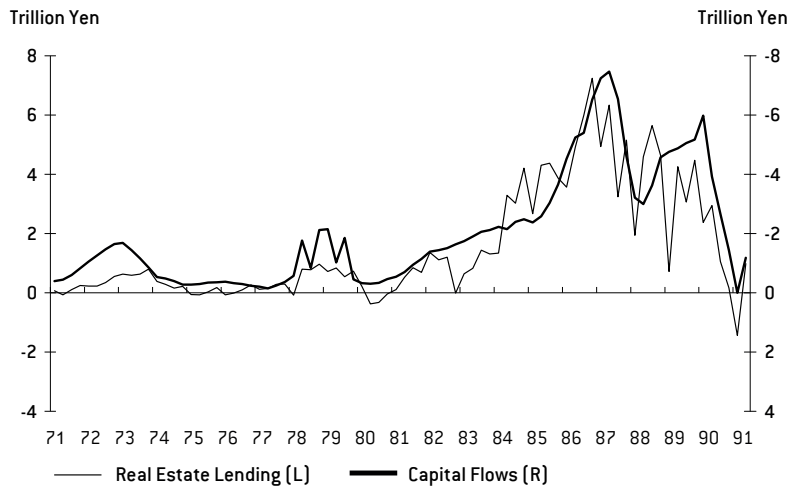
There is a snag. The currency of the country that is printing too much money does not weaken automatically. Foreign exchange dealers act on

information they receive, and this affects exchange rates. So if the traditional indicators that the dealers watch do not pick up the excess money creation in the country concerned, and if the country has a current account surplus, so that there is demand for its currency (because it is selling its products successfully to the world), then printing a lot of extra money and trying to exchange it for U.S. dollars might work. A neat financial trick could be pulled off: The country can just print money and buy foreign assets. Economists call the phenomenon in which prices do not reflect monetary changes "money illusion."

Yen Illusion: Japan Printed Money and Bought the World

What happened in the 1980s in Japan may be one of the biggest bouts of money illusion ever witnessed. Not only did domestic investors and bankers suffer from money illusion, but so did the rest of the world. Effectively, Japan printed money and went out to buy the world. The usual measure of inflation is the consumer price index. As we have seen, though, the excess credit creation was not used to buy goods and services. Most of the excess money went into financial transactions, producing asset price inflation. Thus the CPI remained stable, growing 1.3 percent on average in the second half of the 1980s. The overall WPI, thanks to declining prices of imports, actually fell, on average, 2.7 percent in the second half of the 1980s, having grown 2.3 percent in the first half.[27]

Figure 9.3 **Net Long-Term Capital Flows and Bank Lending to Real Estate Firms**



Source: Bank of Japan; Ministry of Finance

Any suggestion that the soaring capital outflows were connected to the Japanese bubble was dismissed by leading economists. They argued that high land prices could not possibly affect capital flows: When the Japanese sold their land, they sold mainly to other Japanese. This would therefore not increase their overall ability to invest abroad, as the seller of the land would have more money but the buyer would have less—a zero-sum game.[28] In actual fact, land prices were driven up by excess credit creation. This extra money could also spill abroad. In practice this could take the direct route of a large Japanese real estate developer borrowing from a Japanese bank and buying prime real estate in Hawaii, California, New York, or elsewhere. It could also take an indirect route: The excess credit creation boosted the assets of financial institutions, such as life insurers. Having more money available, they had to invest more. Portfolio diversification implied that foreign assets should also be bought—from real estate to U.S. Treasuries or whole foreign companies.

We would therefore expect that Japanese foreign investment should be proportionate to speculative credit creation. Figure 9.3 plots Japanese foreign investment against real estate loans. As can be seen, there is a close correlation, quite unusual for such volatile financial data. Japan created new hot money and then bought up the world. Despite the enormous capital outflows, the yen did not weaken. To the contrary, it rose 106 percent from 1985 to 1987.[29]

Japan had pulled off the same trick that the United States had used in the 1950s and 1960s, when U.S. banks excessively created dollars. Corporate America used this hot money to buy up European companies. While the United States had the cover of the dollar standard, Japan's cover was its significant trade surpluses, which convinced observers that the yen had to be strong. As the yen did not weaken, the world suffered from the biggest bout of money illusion on record—the Great Yen Illusion.[30]

How to Prolong a Recession

Seven Lean Years

By mid-1995, Japan's recession had already lasted far longer than most economists had predicted. Analysts and investors who had been holding out for a full-blown recovery—and there were many in the first half of the 1990s—became gloomy as they surveyed the economy. The yen had risen to around ¥80/$—unthinkable for many just half a year earlier. Exporters were under pressure, demand in the economy faltered, production growth slowed, inventories built up, and firms cut costs to stay in business. Increased competition and deregulation put further deflationary pressure on the economy. Price destruction made consumers postpone purchases as the layoffs pushed up unemployment to a new postwar high. Meanwhile, the banking system was weighed down by bad debts.

Unexpected by most observers, the economy staged a sudden recovery in 1996, growing by around 4 percent. But this was not sustained: The economy slumped again in 1997 and 1998. It seemed to take the yen with it this time. It collapsed to nearly ¥147/$ on June 15, 1998, around 80 percent weaker than its peak in April 1995. Yet the weak yen did not help the Japanese economy. To the contrary, most analysts now considered it as a sign of weakness and of capital flight from a country that seemed headed toward economic meltdown.

Attempts by the authorities to stimulate the economy had been to no avail: The downward spiral was accelerating and had turned into a vicious cycle of contracting demand, falling prices, squeezed companies, and further contracting demand. Few economists thought about recovery.

Yet most observers were once again surprised by a sharp recovery of the economy in 1999 and a more than 50 percent rise in the Tokyo stock market. But the stock market peaked in the first quarter of 2000 and both market and economy slumped once again in mid-2000 and 2001. By early 2002, most commentators had given up hope of a speedy recovery. There had been too

many false starts. Each time the economy recovered, it seemed to sink back into recession soon after.

Who Is the Perpetrator?

Since 1991, the government and the Ministry of Finance have been trying to boost the economy by using interest rates. The Bank of Japan lowered the official discount rate (ODR) ten times in the 1990s, beginning with the first reduction in July 1991, before which it stood at 6 percent. Prior to September 1993, it was lowered seven times, reaching a historical low of 1.75 percent. The ODR was further lowered to 1.0 percent in April 1995 and to 0.5 percent in September 1995. In October 1995, the uncollateralized overnight call rate (officially declared the "target operational rate") was "guided" below the ODR for the first time (at around 0.47 percent). Three years later, in October 1998, the Bank of Japan lowered the call rate further to a new record low of 0.33 percent. In February 1999, it fell to 0.1 percent—what at the time was called a "zero interest rate policy." After a temporary hike in August 2000, the call rate was lowered again to 0.12 percent in March and 0.02 percent in April 2001. In September of that year, the ODR was lowered to 0.1 percent and the call rate to 0.003 percent. After that, it fell to a wafer-thin 0.001 percent.

Due to the apparent failure of monetary policy, the politicians had been pushing for Keynesian fiscal stimulation. During the 1990s, over a dozen large-scale government spending packages had been implemented, amounting in aggregate to over ¥145 trillion—also apparently to no avail.

If both the monetarist and the Keynesian prescriptions did not work, many economists thought, what was there left to do? They started to listen to those voices that argued that the recession was due to Japan's economic system. The only way out was to introduce deep structural changes, such as deregulation and opening of markets. By 1998 a broad consensus had emerged in favor of a historic structural transformation. Business leaders, politicians, and, surprisingly, even members of the bureaucracy argued that fundamental change was necessary.

Such a conclusion had become very tempting, especially as the U.S. economy went from strength to strength during the 1990s. High economic growth, record low unemployment, low inflation, and rising asset prices seemed to usher in a new economic era in America. This was said to have been the result of productivity gains stimulated by free markets. Since 1996, the annual G7 summit had become a platform for the U.S. president and his treasury secretary to assert the superiority of U.S.-style capitalism. If a country wanted to be successful, they would frequently proclaim, deregulation, liberalization, and privatization were necessary. With Japan and the rest of Asia in a slump, U.S. pressure, and with it the pressure of international organizations, mounted for

them to abandon their old economic systems and introduce the successful model demonstrated by the United States.

It had been conveniently forgotten that only a decade earlier the tables were turned. In 1991, the U.S. economy was in recession. U.S. banks had lent too much to real estate speculators in the 1980s, and by 1990 bad debts were threatening even the largest U.S. banks. The banks had become risk-averse, less able and less willing to lend. As a result, small firms, dependent on bank funding, received insufficient funding. As they laid off staff, demand slumped. With credit creation shrinking, the economy contracted in 1991.

At the time, pessimism about the U.S. economic structure was about as widespread as optimism a decade later. Many authors were even advocating that the United States introduce the Japanese system, which, shortly after the peak of its 1980s bubble, seemed superior. In 1991, most commentators expected Japan to overtake the U.S. economy by the turn of the millennium. The twenty-first century was going to become the Japanese century.[1]

What we learn from this is that the assessment of what constitutes a successful economic structure is not independent from the business cycle. During times of boom, commentators are quick to credit the economic system. A slump is seen as proof that the economic structure is at fault. In actual fact, both are merely reflections of the business cycle. And that is determined by credit creation.

Government Spending Ineffective

During much of the 1990s, however, most observers analyzing Japan argued that credit growth was slow only because there was no demand for loans in the economy. Their policy prescription: Domestic demand had to be boosted by government spending, and then loan demand would also rise. For a decade, the government followed their advice, thus boosting government debt to historic levels and ruining Japan's fiscal virtue.

Yet we saw already in chapter 4 that the credit market is supply-determined. Money is different from apples and oranges—there is always demand for it. There are always enough entrepreneurs who would like to borrow money and invest in risky projects. Potential credit demand is so large that if banks raised interest rates to equalize demand and supply, the interest rates would rise enough to disqualify conservative and sensible investors, leaving only the high-risk entrepreneurs as bank clients. That is why banks keep interest rates below what would be the market clearing rate and instead select their borrowers: Banks ration credit. The mac-roeconomic result is the virtually permanent supply-determination of the credit market.

Meanwhile, fiscal spending could not boost demand, because it does not create money. It transfers purchasing power into the hands of, for instance,

the construction industry, which receives large-scale government orders. Many economists simply add up these amounts of extra government spending and expect that GDP will be boosted by that amount.[2] Again, the fallacy of composition has struck, which is due to the neglect of the government's need to fund its fiscal expenditure. The question is how the fiscal spending is funded. In the case of pure fiscal policy, dominant during the 1990s, the Ministry of Finance would issue government bonds to raise the money. Thus the money for the fiscal stimulation of the private sector is taken from the private sector itself. Investors, such as life insurers, have to pull the money for the purchase of government bonds out of other investments. We see that fiscal policy does not create new purchasing power but merely reallocates already created purchasing power. Pure fiscal policy is largely growth-neutral.[3] Indeed, over the 1990s it has been shown that for every yen the government spent in fiscal stimulation, private demand shrank by one yen.[4]

Put simply, credit creation determines the size of the economic pie. Fiscal policy determines how that pie is divided up between the private sector and the government. For unchanged credit creation, increased fiscal spending must therefore reduce the amount of purchasing power available in the private sector. Hence, without an increase in credit creation, the private-sector share of the national income pie must shrink (quantitative crowding out). In particular, the main customers of banks, the small firms, suffered from the credit crunch for most of the 1990s. That depressed consumption and hence GDP.

Print Money

For more net new transactions to take place, more purchasing power is necessary. This allows an increase in the economic pie. The necessary and sufficient condition for an economic recovery is the creation of new purchasing power. Purchasing power is created by the banking system and the central bank. Policies to create a recovery therefore had to aim at increased credit creation of either one or both of these. Even if policies to help banks were slow in showing results, this would not prevent an immediate recovery—if the central bank fulfils its mandate and creates new purchasing power instead. Since 1992, a recovery in Japan could have been triggered at any time. A sufficient condition would have been for the Bank of Japan to switch on the printing presses.[5]

Inflation would not have resulted from such money creation. If the economy were operating at full capacity, printing too much money would indeed lead to inflation. That is why under circumstances of deflation and unemployed resources, printing more money will increase demand and reduce deflation. Inflation occurs only once the economy has expanded sufficiently

for all factors of input to be fully used, for unemployment to be reduced to a minimum, and for all factories to operate at full capacity; on top of that, demand is boosted beyond this full capacity. In other words, once an economy is fully reflated and growing at the maximum potential growth rate, the central bank would have to slow the printing presses. But in Japan's predicament of the 1990s, there was no such worry.

Money Printing Increases Demand

Of course, "printing money" does not merely mean an increase in paper money. We have seen that nowadays the majority of money takes the form of "book money" or, more correctly, "computer money." The central bank can increase that at any time, without limit, by simply buying assets from the private sector and paying with newly created credit. Economically speaking, it does not matter what the central bank buys. It could buy neckties, toothpaste, or real estate.

The Bank of Japan could, for instance, go out and purchase the house of Mr. Harada. It could entice him to sell by offering a price above the market rate. That would not be a problem for the Bank of Japan, because it could print the money, or, more precisely, create new purchasing power that previously did not exist. It does not matter to Mr. Harada whether he gets the money in the form of paper currency or a BoJ transfer to his bank (which simply means that his bank will get a credit in its books with the Bank of Japan and he in turn will get a credit in his books with his bank). Mr. Harada now has more purchasing power available, and he most likely will use at least a small part of it to buy something else— another house, for example. He transfers the newly printed cash to the seller. That person then goes out and buys something from someone else, and so on. Suddenly, more economic transactions take place, and the reverberations are felt throughout the economy. Increased demand has been created by the BoJ out of nothing.

Central Bank Credit Creation

In reality the Bank of Japan does not buy much real estate (although it has acquired many real estate properties, such as houses, clubs, and recreation facilities for the use of its staff). In order to inject large amounts of money in a short time, the central bank tends to buy government bonds, bills, and commercial paper issued by corporations. When the Bank of Japan buys such paper in the markets, it helps the economy just as much as if it purchased a piece of land.

This can easily be visualized: With the banks paralyzed by bad debt, many medium-sized and small firms are suffering from the credit crunch. One way out is for them to issue debt certificates, such as commercial paper or corporate bonds. This paper can then be bought by the Bank of Japan, which in ex-

change hands over new yen notes to the firms. Banks may act as intermediaries by first discounting the bills, which the central bank rediscounts. But this does not change the analysis. As a result, the firms are able to receive money that did not exist before. Smaller firms can also receive the funds indirectly, in the form of trade credit from larger firms that issue such debt paper. The result would be the same. When the banks are not doing their job of lending and creating new money, the Bank of Japan can step in and act as a banker to the nation.

There is another way to illustrate how simple "money printing" helps the economy. We have found that pure fiscal spending funded by bonds that are bought by investors cannot stimulate new economic growth. No new purchasing power is created; old purchasing power is merely diverted. But fiscal policy can be made effective if it is backed by credit creation. If the government bonds are not sold to private investors but are bought or underwritten by the central bank, then credit creation increases, and the fiscal stimulation serves to inject this new money. What makes the difference in that case is not the fiscal spending but the action of the central bank to create money. Alternatively, the government can switch funding of the public sector borrowing requirement from bonds to simple loan contracts from banks.

Print Money and Create Parks

London boasts 26.9 square meters of park space per capita, New York 29.3 square meters, and Paris 11.8 square meters. Tokyo, however, comes last in a long list of the world's major cities, with 5.3 square meters per head.[6] Moreover, Tokyo has the least park space of all the big Japanese cities. A good way to boost demand, stimulate the economy, invigorate the real estate market, and at the same time increase the quality of life in Tokyo would be for the Bank of Japan to print money and buy up land all over Tokyo to turn into parks and facilities that can be used by the public.[7] Printing money to boost park space per head to the relatively low Parisian level could, depending on area and price, inject almost ¥70 trillion into the economy—not dissimilar to one estimate of the size of the bad debts. Of course, other, even more productive uses could be made of newly printed money. Facilities could be established that address public needs, such as an improved medical system or welfare infrastructure for the elderly. In a sense, the recession of the 1990s represented an opportunity to print enormous amounts of money and use them in a beneficial way without what would normally be the price to pay, namely, inflation. Even direct handouts by the central bank to each taxpayer—for instance of ¥2 million each—would be feasible, without any costs. They could simply be considered refunds from the central bank (for failing to deliver the goods).

All these examples serve to demonstrate just how easy it would have been to create an economic recovery as early as 1992 or 1993 to the benefit of Japan

and beyond. Millions of unemployed would have found jobs. It was entirely feasible to create a recovery throughout the lost decade of the 1990s if the right policies had been taken.

History Proves That It Works

Printing money to boost demand is not just a nice theoretical idea. It has been tried and tested. We have already seen how the BoJ under Ichimada and the government's Economic Stabilization Board successfully reflated Japan's economy right after 1945, when the banks were in far worse shape than in the 1990s, and when the economy had been devastated by carpet bombing. There are other examples, for instance, the 1930s, when the world was gripped by the Great Depression, which triggered the structural transformation of Japan. Just as in the 1990s, the problem was that banking systems shut down, first in the United States, then Germany, Japan, and other countries.[8] As we saw in chapter 4, banking systems are fundamentally fragile because they are based on what many would consider fraud: Banks do not actually have the money that they guarantee is being deposited with them. This becomes clear particularly when the money is lent out simultaneously over ninety times for unproductive, speculative purposes and hence in aggregate there is little hope of its being paid back. U.S. banks during the 1920s, for instance, had lent too much to speculators, driving up stock and land prices.[9]

However, Germany and Japan were the first countries to pull out of the Great Depression. While the U.S. central bank failed to reflate and allowed many banks to go bankrupt, the German and Japanese central banks started to print money sooner. Although it is often said that it was fiscal policy that stimulated the Japanese and German recoveries, it was in fact the creation of new credit that made fiscal policy effective. There is no known example of a country where aggressive central bank money printing did not stimulate demand. Whenever a credit bust follows an excessive credit boom, a recovery happens only after the banks or the central bank expands credit creation again.

Solving the Banking Problem

While the central bank has to kick-start the economy, simultaneously the problem in the banking system needs to be solved. After a decade of failed attempts, it may be appealing to think of this bad debt problem as being complex beyond imagination, but in actual fact it is an issue that could be solved immediately, at zero cost to anyone. And it should have been solved long ago. While banks are burdened with significant amounts of bad debt, they will not fulfill their role of lending and creating money. The only solution is for banks to write off their bad debts and delete them from their books. Since

accounts are made up of assets and liabilities (loans are assets for banks, and deposits are liabilities; equity is on the liability side) and the two must always balance, simply deleting the bad assets will not do. Liabilities would exceed assets—which is one definition of insolvency. So in order to be able to write off the bad debts, the banks need to put something else on the asset side of their balance sheet. These are called reserves, and they are put in place of the hole that the write-offs would create in the balance sheet. Put simply, the banks need money.

So what we need to do is to give money to the banks. We are relieved to find that the problem is not more complicated than that. For money, as we know, can be created, either by banks themselves or by the central bank. The simplest solution is therefore for the Bank of Japan to print money and give it to the banks.[10] Of course, the Bank of Japan would like to obtain something in return, in order to list it on the asset side of its own balance sheet. These are details. The banks could issue a debt paper, which states that they borrowed the money from the Bank of Japan (for instance, at zero interest). Or they could issue new shares, such as preferred shares, which the Bank of Japan would then buy. Alternatively, they could transfer ownership of the land they own to the Bank of Japan.

Bad Debt Problem Can Be Solved in a Day

If it so wished, the Bank of Japan could have solved the bad debt problem in its entirety within one morning. What it needed to do was to purchase all bad debts from all banks at face value, and pay for them through the creation of new money. The banks would have welcomed this idea, for they would have received cash in excess of market value for loans that had gone bad. What about the Bank of Japan? Would it not suffer huge losses? Actually, no. By purchasing the bad debts at the nominal face value of the 1980s, the central bank would appear to make a loss (since their market value is now much lower). However, the central bank, having a license to print money, always makes a gain: It has zero fund-raising costs and can obtain something that has some value (even if only 10 cents on the dollar) for free. The true cost for the Bank of Japan is zero. It creates the money out of nothing and therefore always gets a good deal. In practice, transferring the cash to the banks does not even involve printing presses, as most of the money is created online in the Bank of Japan's computers. Since the banks all have accounts with the BoJ, it could use its electronic transfer system to rid the banks of all the bad debts within seconds—instead of taking over a decade.

There are of course many variations on this theme. For example, if the central bank is reluctant to show any such assets on its balance sheet, a government institution could be used that buys the bad debts from the banks and

itself is funded by issuing bonds or bills to the central bank. The possibilities are there, *if* there is a will to solve the bad-debt problem.

Not only would there be no costs to the Japanese central bank, more importantly, there would also be no costs to the economy or society at large. If, instead, government money (i.e., tax money) is used to bail out banks, then the taxpayers will have to refund the money in the future. If the BoJ simply prints the money, taxpayers do not incur a liability. Since the economy has been in the grip of deflation, this would also not produce what is normally the cost of excessive credit creation, namely, inflation. In this situation, at best we would get less deflation— which would be a good thing.

How to Stimulate Bank Credit

Alternatively, money could be transferred to the banks by helping them make sizable profits. There are several ways in which this can be achieved. One way is for the central bank to corner a market to help the banks—in effect creating a mini bubble in a certain market in which banks invest heavily, providing large profits for them. This turns out to be a relatively common technique by central banks to help their banking systems. Another, more transparent way would be to use the banks' ability to create credit to fund fiscal spending. As we saw, the main reason fiscal spending has been ineffective is that it was not linked to greater credit creation. By borrowing from the private sector through bond issuance, quantity crowding out occurred. This would not be the case, however, if the government changed its method of funding the public-sector borrowing requirement. Instead of issuing bonds, it could enter simple loan contracts with the banks. The banks would be eager to lend, as the government is a zero-risk borrower. Unlike the bond market, bank credit creates new purchasing power. The money spent by the government would not be withdrawn from the economy but would be newly created—thus addressing the cause of the recession, namely, a lack of credit creation. No crowding out would occur.[11] Net demand would increase. Such a method is of course particularly useful at times when the central bank refuses to monetize fiscal spending by buying government bonds. Finally, if the Bank of Japan really wanted to create a recovery, it could also have used its window guidance mechanism to simply "guide" bank lending higher.

Moral Hazard Principle

Should the central bank bail out the banks and create a recovery? Economists are concerned with an incentive problem, referred to as "moral hazard." To avoid it, those who create problems should know that they face some kind of penalty. If banks expect to be bailed out, there would be no incentive for them to avoid reckless lending. This principle already tells us that taxpayers

should not be made to fund any bank bailout, because the bad debts were not their respsonsibility.[12] Thus it is often argued the Japanese banks should not be bailed out at all. But there are also problems with this argument. First, it is now almost twenty years too late. We should have worried about it in the early 1980s, when banks engaged in excessive lending. However, since the mid-1990s, the main problem has been too little lending. Thus one could bail out the banks on this occasion, and after the bailout make suitable institutional changes to avoid future reckless lending of the type that occurred in the 1980s. To do that properly, however, one would have to examine closely just why the banks were lending so aggressively during the 1980s.

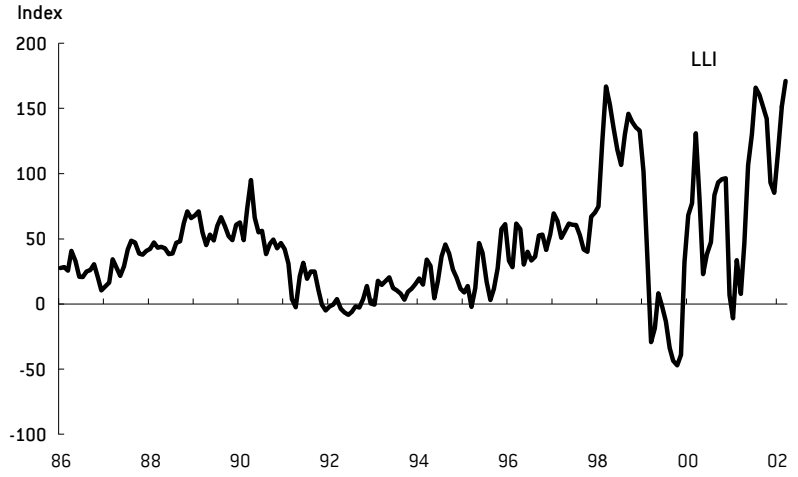
Second, the above argument assumes that the banks were the main perpetrators of the lending-driven bubble of the 1980s. Indeed, it has been shown that bank lending explains the bubble.[13] However, we have not yet established just why the banks were lending so much.

How Much Money Has the BoJ Created?

Many of the above ways to boost bank credit would have taken some time to implement. Since Japan's economic downturn became painful for small firms and hence the majority of the Japanese people from 1992 onward, already at that time the fastest method to kick-start the economy should have been adopted. In Figure 9.2 in chapter 9 we measured bank credit creation in the real circulation (i.e., without the bubble sectors) and saw that it had fallen sharply from 1990 onward. A year later, nominal GDP growth also fell. Credit creation remained minimal and even turned negative in late 1994—resulting in negative nominal GDP growth in early 1995—for the first time in postwar history; indeed, the first time since 1931.[14] In such circumstances, where bank credit creation is collapsing, it is the duty ofthe central bank to counteract this and do what banks are not doing—step in and create more credit.

No doubt, the BoJ has been holding in its hands the key for an economic recovery. Let us therefore check just how much money the Bank of Japan has been creating during the 1990s. First, we need to measure its credit creation correctly. Since the central bank has to buy something from the private sector when it creates money, and since it has to sell something to neutralize purchasing power, a more accurate measure of central bank credit creation is found by simply adding up all its transactions in all markets.[15] Many economists, when analyzing the central bank, confine themselves to adding up what the Bank of Japan calls "short-term money market operations," because they are conveniently announced on a daily basis. However, these operations do not represent the total net credit creation of the BoJ. Instead, the net credit creation of the BoJ is best measured by adding up *all* its transactions. Figure 10.1 shows one such measure—based on figures released by the central bank.

Figure 10.1 **Bank of Japan Credit Creation (as measured by Profit Research Center's Leading Liquidity Index)**



Source: Bank of Japan; Profit Research Center Ltd.

Assuming that the Bank of Japan has supplied accurate data, this should provide a reasonably useful measure of the Bank of Japan's credit creation.[16]

Aggressive Money Printing in 1998 and 2001

We see from this chart that in the 1980s, from around 1986 onward, the Bank of Japan stepped up its credit creation significantly. This was to be followed by a sharp reduction in credit creation: In 1992, our index fell into negative territory. This implies that the Bank of Japan was withdrawing purchasing power from the economy. It engaged in the opposite of credit creation. Credit creation remained minimal still in 1993; in 1994 it rose somewhat, only to fall sharply again and turn negative in March 1995. From around May 1995 until early 1997, credit creation rose, but fell once more later in 1997. While the index has been on an up trend, this was marred by frequent periods of significant credit reduction. In other words, for most of the 1990s, the BoJ did not print money aggressively, or sufficiently for a lasting recovery.

In March 1998, the Bank of Japan suddenly boosted credit creation sharply. Our index reached the highest level since January 1974, when the BoJ was supplying the funds for the 1970s real estate bubble. This was good news for Japan and, indeed, was followed by a sharp economic recovery in 1999, and a stock market rise exceeding 50 percent. Unfortunately, the central bank turned off the taps with almost equal vigor in 1999, and went beyond this by

actively withdrawing money from the economy for much of that year. This could not fail to end the nascent recovery. Indeed, by 2001 the economy was once again in the midst of another deflationary round, with demand falling and prices declining faster again. In June 2001, the central bank changed its monetary policy once more and sharply increased the quantity of its credit creation.[17] As expected, this contributed positively to the economy in 2002, despite the severe slump in 2001 and early 2002. But will any recovery last? The Bank of Japan's policy so far has not been one that is aimed at creating a sustained economic recovery. Instead, we had temporary minor recoveries within one long recession.

Why Did the BoJ Not Fully Reflate?

It is often said that the job of central banks is to counteract business cycles and create a stable economy. That is also what the proponents of the U.S. Federal Reserve argued in the early twentieth century when they wanted to persuade Congress that a central bank was necessary. However, upon analyzing the monetary policy of the Bank of Japan over the past decade, it becomes clear that Japan's central bank did not engage in countercyclical monetary policy. To the contrary, it created more purchasing power at times when there was already too much—the late 1980s—and it created far too little purchasing power, even decreased purchasing power, at times when there was already too little and a credit crunch squeezed the entire economy—the 1990s. Why was the BoJ following such a policy course? It is time to take a closer look at just what the BoJ has been up to.

11 The Battle of the Yen

The Powers of MoF

Until 1998, Japan's Ministry of Finance controlled—legally speaking—most aspects of economic life in Japan. It controlled taxes through the National Tax Agency and the tax bureau, the government budget through the budget bureau, government bond issuance via the finance bureau, foreign exchange intervention and international capital flows through the international finance bureau, imports and exports through the customs bureau, securities transactions via the securities bureau, and the banking sector via the banking bureau. For good measure, the Ministry of Finance prints government documents and even the paper money issued by the Bank of Japan at its printing bureau (the central bank pays a small fee for this, but the ministry merely acts as a printer and has no say over the quantity printed).

MoF's power was exerted through formal rules as much as through informal guidance; some were published as *tsutatsu* (administrative ordinances), while some were unwritten, extralegal "traditions" handed down over generations of bureaucrats. MoF influence seemed to permeate economic and political life, because former finance bureaucrats obtained influential posts as heads of government financial institutions, public corporations, private banks, securities houses, large firms, or as politicians. A substantial number of Diet members are former finance ministry bureaucrats.

The Law Said: MoF Is in Control

Although monetary policy was implemented by the Bank of Japan, the laws gave the oversight to the Ministry of Finance. Legally, the highest decision-making organ at the Bank of Japan was the Policy Board, which, as we saw, was instituted in 1949 by the U.S. occupation to "democratize" the central bank and dilute the wartime character of its setup. Apart from the BoJ governor and deputy governor, the policy board also included outsiders. Policies were discussed and then voted on. The well-known truth, however, was that

the board merely rubber-stamped decisions previously made by the executive board of the Bank of Japan, which was composed of BoJ staff and headed by the governor.

It is generally accepted that decisions about lowering or raising the official discount rate (ODR) were made only in close consultations with the Ministry of Finance. That was not simply due to the "informal" power of MoF, but also perfectly legal: The Bank of Japan Law, which established the responsibilities and competence of the Japanese central bank, stated that the Bank of Japan can be told what to do in most areas of its business by the Ministry of Finance. Article 42 put it bluntly: "The Bank of Japan shall be under the supervision of the competent Minister." Article 43: "The competent Minister may, if deemed particularly necessary for the attainment of the object of the Bank of Japan, order the Bank to undertake any necessary business, or order alterations in the By-Laws as well as other necessary actions." And article 44: "The competent Minister may ... issue orders or take such actions as are necessary in the exercise of his supervision." And the list continues. In the first forty-seven articles of the Bank of Japan Law that dealt with its rights and duties, the phrases "with the permission of the competent Minister" or "in accordance with the prescriptions of the competent Minister" appeared twenty-nine times. Although the "competent Minister" is the finance minister, in practice this has meant the highest-ranking MoF bureaucrat, namely, the vice minister of finance. Monetary policy was therefore made "in accordance with" MoF. This is not surprising, given the wartime origin of the law.

MoF Thought It Was in Charge

In the postwar era, MoF frequently exerted direct influence over ODR policies.[1] The jurisdiction over foreign exchange intervention was even more clear-cut, as it is governed by the separate Foreign Exchange Law, which grants sole authority for foreign exchange intervention to the Ministry of Finance. The Bank of Japan merely acts as the executive branch of MoF that implements whatever size foreign exchange intervention is decided by the international finance bureau at MoF. This is also why foreign exchange markets watched the actions of the flamboyant vice minister of international finance, Eisuke Sakakibara, so closely in the mid-1990s.

Given these legal facts, there seemed little doubt to most observers: MoF was in charge. The bubble was created by the Ministry of Finance through excessively low interest rates. From 1984 to 1989, an ex-MoF vice minister, Satoshi Sumita, was even governor of the Bank of Japan. The BoJ, with its professional knowledge, knew better, but given its weak legal position, it could not help implementing the wrong policies forced on it by the Ministry of Finance. Even the average *salariman* now understands that in the 1980s, banks

have been the key accomplices of speculators who squandered sums in excess of a quarter of annual national income. The banks are supervised by MoF, and MoF is their patron. During the 1990s, the Japanese weekly papers ran frequent stories about how MoF's banking supervisors dined and were entertained in hostess restaurants in exchange for leaks about when the next bank audit would occur. When MoF responded to the banking problems (which initially erupted in the *jusen*, or housing loan institutions) by suggesting using more tax monies, its reputation was thoroughly tarnished. It seemed that the prosecution's case could be rested: Japan's economic policies were disastrous and the culprit was MoF. Thus MoF had to be punished by being stripped of its powers and broken up.

Hero Mieno

This is similar to the picture painted of Yasushi Mieno, governor of the Bank of Japan from December 1989 to 1994. When he came to power in 1989, he noticed that the monetary policies of his predecessor, the former MoF vice minister Sumita, were too loose. Mieno hated the outcome. Japan, he lamented, was becoming a nation of "haves" and "have-nots," as landowners became extremely rich at the expense of ordinary employees. He decided to end the bubble and raised the official discount rate only a fortnight after becoming governor, delivering the infamous "Christmas present" of 1989. Asset prices, led by stock prices, began to tumble in 1990. They were still hitting new lows more than a decade later, in 2002. Land prices had come down by around 80 percent and were still falling in early 2002. Seven fat years of waste and distortions were followed by more than seven lean years that sobered the economy.

A public dispute between Makoto Utsumi, the MoF vice minister of international finance, and BoJ governor Mieno erupted in 1990. Mieno, criticizing the injustice of the excesses of the bubble, gained the moral upper hand. Proclaiming that he had never owned stock in his life, this clean pair of hands appeared to be creating fair policies that were good for Japan. The media portrayed him as "*onihei* of the Heisei era," a modern-day Robin Hood fighting for the rights of the poor.

Soon after his retirement from his position as governor in December 1994, Mieno embarked on another campaign. Giving speeches to various associations and interest groups across the country, he lobbied for a change in the BoJ Law. His line of argument was to subtly suggest that MoF pushed the BoJ into the wrong policies. To avoid such problems in the future, the BoJ needed to be given full legal independence. According to Mieno, making central banks independent "reflects the human wisdom that has been nurtured by history."[2] Eventually, his case found a sympathetic reception from the coalition government under Prime Minister Hashimoto. Like many observers,

its project team for administrative reform blamed the Finance Ministry for Japan's troubles of the 1990s and hence proposed to revoke many of the ministry's powers. This included the proposal to make the Bank of Japan independent and to take away the power of MoF to appoint and dismiss Bank of Japan officers. In 1997, the coalition submitted a bill to revise the Ministry of Finance Establishment Law and the Bank of Japan Law to the Diet. The new BoJ Law became effective in April 1998, stripping MoF of the power to set monetary policy and making the BoJ legally totally independent.

MoF Tried to Create a Recovery

There can be little doubt that the ministry wanted to create a recovery. In charge of the government budget, it was deeply averse to fiscal deficits and to increasing government debt. Deterioration in these indicators was seen as a blemish on MoF's image. A recession would reduce corporate, income, and sales taxes. It would boost unemployment benefits and social welfare expenditures. On top of that, politicians would demand government spending packages.[3] Expenditures would balloon and revenues shrink, pushing the budget into deficit. Deficits are funded by bond issuance, and that is also not popular with MoF. Most of all, MoF did not like recessions because it was legally in charge of the economy. It would thus also get the blame for a recession. Along recession could cost it all its long-standing power.

MoF's worst-case scenario occurred: The economy failed to recover. As a result, far-reaching administrative reform was implemented. The year 1998 went down in Japanese history as the year in which the Ministry of Finance lost its main power—its monopoly on budgeting. For the first time in the postwar era, it was politicians who drew up the stimulus packages. MoF lost control over banking supervision to an independent financial supervisory authority. It lost its licensing power thanks to the Big Bang deregulation program. Finally, it lost control over monetary policy to an independent Bank of Japan. To add insult to injury, in January 2001 MoF even lost its grand old name. Today, the Ōkurashō does not even exist.

While MoF clearly had a good incentive to create a recovery, the case is less clear-cut for the Bank of Japan. That is why it is time to take another look at the evidence.

Reexamine the Evidence, Dr. Watson

We are back in 1991. MoF, in the belief that the key monetary policy tool is the rate of interest, had been very unhappy with the BoJ's high interest rate policy and had been exerting influence to obtain a lower official discount rate. In 1991, the BoJ gave in and lowered the official discount rate for the first time in the 1990s. When the economy did not improve and, to the contrary, slowed

down further, MoF used its legal status to lean on the Bank of Japan several more times to lower the discount rate. When the economy deteriorated further in 1992 and 1993, and strains in the financial markets had been reflected in sharp drops in the stock market, MoF's frequent fiscal stimulation packages seemed to betray signs of panic. Yet however badly the ministry wanted a recovery, it was elusive.

Throughout its postwar history, the Bank of Japan had relied on the quantity of credit to monitor and control the economy. From its experience of the 1950s and 1960s, when it kept interest rates especially low to ration credit and allocate funds to selected industries, the BoJ knew that with credit rationing, lower interest rates do not lead to an increase in the quantity of credit. In the 1990s, the bad debt problem paralyzed the banks and created severe credit rationing. Hence, the policy prescription must have been obvious to the Bank of Japan. Since credit can be created only by banks and the central bank, a decline in bank credit growth due to quantity rationing must be countered by an expansion in Bank of Japan credit creation. However, Bank of Japan credit creation did not increase significantly. To the contrary, as late as March 1995, the Bank of Japan withdrew money from the economy. The central bank failed to support government policy as the Bank of Japan Law mandated.

Fiscal Stimulation Neutralized

The same fate awaited the government's fiscal policy. Between 1992 and 1994, four massive fiscal stimulus packages amounting to ¥45 trillion were added on to regular government spending. More than ¥100 trillion has been added in a string of further spending packages since.[4] The enormous size of the stimulation programs reflects just how desperately MoF and the politicians wanted a recovery. Once again, the goal eluded them. The problem was that fiscal spending was funded by bond issuance and the money largely taken from the private sector. Without simultaneous central bank (or bank) credit expansion, fiscal spending had to reduce private demand. Yet the Bank of Japan kept credit tight. Thus, the fiscal stimulus packages of the 1990s were wasted and merely increased government debt.

Why would MoF let the Bank of Japan get away with failing to support its policies? The answer seems to be that MoF officials believed that they were in control of monetary policy, since they could manipulate interest rates, fiscal policy, and exchange rate policy. The old generation of MoF control bureaucrats, who had briefly competed with the Bank of Japan for increasing credit creation in the early postwar era, had long gone. The bureaucrats of the Economic Stabilization Board had been dissipated and their institutional knowledge lost. Neoclassical economics had become the mainstream approach also at Japanese universities. Credit creation was not taught anymore. The knowl-

edge existed inside the Bank of Japan, but the central bank failed to share it with MoF or the general public. To the contrary, Bank of Japan staff has spent considerable resources on publications and PR, telling the public that its policies are determined by manipulating interest rates, and such measures as credit are not interesting.[5] As a result, by the early 1980s MoF was no longer concerned with the quantity of credit as a monetary policy tool.

The Battle of the Yen

In late 1994, when both interest and fiscal policy had proven to be ineffective in stimulating the economy, MoF attempted to play its last trump card: exchange rate policy. The hope was that if the yen could be weakened, at least external demand could support the economy. The policy tool employed was so-called foreign exchange intervention, official purchases or sales of foreign exchange. According to the laws, the Bank of Japan merely acts as the executing organ, while MoF makes the decisions.

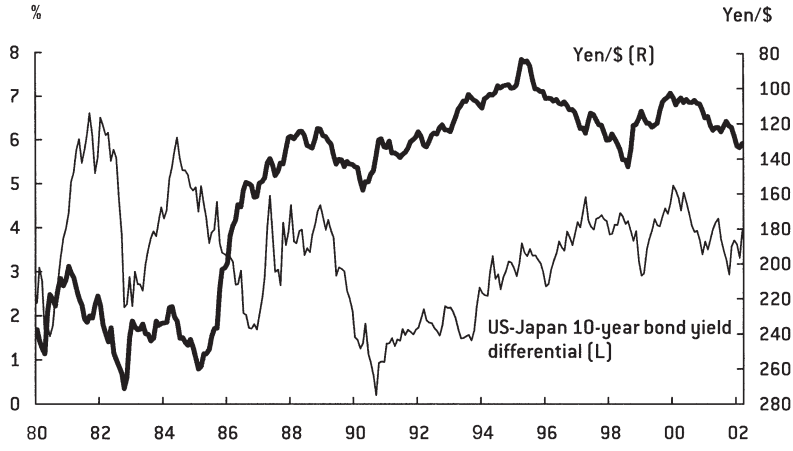
So the ministry ordered the Bank of Japan to sell large amounts of yen and buy U.S. dollar assets (mainly U.S. Treasuries). In the second half of 1994, this amounted to U.S. $7 billion. In February and March 1995 it reached U.S. $19 billion, one of the largest quarterly foreign exchange interventions on record. The cumulative dollar purchases had boosted the official foreign exchange reserves to U.S. $131 billion at the end of March 1995, the largest in the world.[6] The theory was that the demand for dollar assets would strengthen the dollar, hence weaken the yen. But again MoF was disappointed. Despite such unprecedented intervention, the yen did not weaken. To the contrary, it strengthened. During the months from January to April 1995, the yen rose by 20 percent, hitting a historic high of ¥79.75/$ on April 19, 1995. Such previously inconceivable yen strength dealt yet another blow to the battered economy.

Exchange Rate Theory Built on Interest Rates

Just what determines the yen-dollar exchange rate? The leading theoretical models of international capital flows and exchange rates are based on interest rates as the main determinant variable. If interest rates are higher or rising in the United States compared with Japan, money will flow from Japan to the United States and this will weaken the yen and strengthen the dollar. Analysts and the financial press refer to this theory almost daily.[7]

Although the theory is so widespread that it has become common knowledge, frequently quoted by the financial press, it does not stand up to an empirical test. Figure 11.1 presents the yen-dollar exchange rate and the differential between ten-year government bond yields in the United States and Japan. One is tempted to conclude that things are working out; as can be seen, there

Figure 11.1 **Yen/U.S.$ Rate and U.S.-Japan Interest Differential**



Source: Board of Governors of the Federal Reserve System

seems to be a weak link between the two. Unfortunately, reality dares to ignore theory. Whenever the U.S.Japan interest differential widens (i.e., U.S. interest rates are increasingly higher than Japanese rates), the dollar does not strengthen, but often even weakens. In the first half of the 1990s, for instance, the U.S.-Japan interest differential widened, as U.S. rates rose and Japanese rates dropped. But instead of a stronger dollar, this was accompanied by a stronger yen—peaking in April 1995. Over the past two decades, the correlation between exchange rates and interest rates has not been supportive of the interest theory of exchange rate determination. The same result holds for short-term rates.[8]

Poring over the empirical literature on exchange rates, the largely unanimous conclusion of dozens of research papers is that exchange rates cannot be explained, let alone predicted. The "random walk" so far beats anyone's currency forecasts, we are told. In other words, there is no specific model or set of explanatory variables that predicts the exchange rate any better than the last few actual exchange rate observations. "Economists do not yet understand the determinants of short- to medium-run movements in exchange rates," concluded one experienced researcher.[9] What exchange rates will do in the future is anybody's guess.

Total More than the Sum of Its Parts

Mainstream interest theory falls afoul of the fallacy of composition: When looking at only one investor, interest rates are a given variable that influences

the behavior of this investor. Economists simply add up all investors. The fallacy lies in the aggregation. What is true for one individual investor *cannot* hold for all. If, for instance, all investors shift their portfolios in favor of one specific asset, interest rates will be affected. For all investors in the United States and Japan taken together, the interest rate differential is not a given, external variable. To the contrary, it is the result of everybody's investment activity.[10] Put simply, all the information that is in the bond markets (and hence interest rates) is also at any moment in time in the foreign exchange markets. Both are driven by a third factor and one cannot explain the other. A model based largely on interest rate differentials therefore can't have much predictive power.

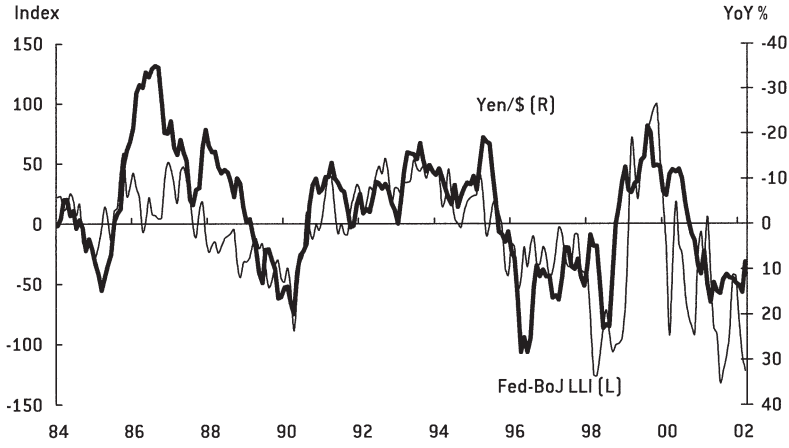
We have already found in chapter 4 that due to unrealistic assumptions (perfect information) and the fallacy of composition, modern economic theory has misguidedly placed the emphasis on the price of money (the interest rate). In reality, the most important determinant is the quantity of new purchasing power. Without perfect information, markets cannot be expected to be in equilibrium. Instead, they are likely to be quantity-rationed. Hence quantities determine the outcome, not prices. We should expect the same to hold for exchange rates. Instead of the interest differential, they should be determined by the differential in credit creation. Put simply, if the BoJ prints yen faster than the Fed is printing dollars, then the yen should be expected to fall and the dollar to rise.[11] While foreign exchange dealers focused on every word uttered by Eisuke "Yen" Sakakibara of the Ministry of Finance, the yen-dollar rate has been mainly controlled by the Bank of Japan and the Fed.

BoJ and Fed in Control of Yen-Dollar Rate

In Figure 11.2, we have calculated the difference between the credit creation of the Fed and the BoJ and plotted it against the change in the exchange rate. As can be seen, the exchange rate does not follow a random walk, but is correlated with the quantity of credit creation by the central banks. Their relative credit creation seems to explain exchange rates over the last twenty years reasonably well. From 1990 onward, the yen strengthened and the dollar weakened. At the time, the U.S. Fed created dollars rapidly to reflate the U.S. economy; the Bank of Japan did the opposite, to prick the bubble. With fewer yen and more dollars, the dollar weakened and the yen strengthened. The same happened again in early 1995. It also held for the period of extraordinary yen weakness in 1998 and the subsequent strengthening in 1999. Each time, the relative credit creation of the central banks to a large extent explained and predicted the exchange rate.

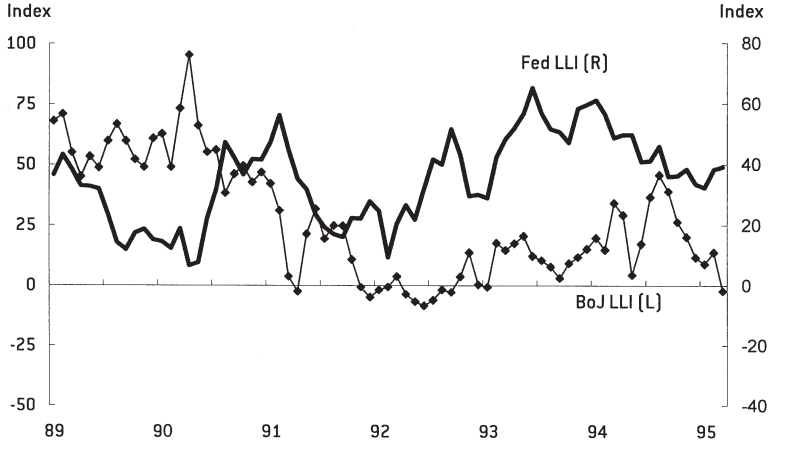
It is now time to go back to the mysterious episode of March and April 1995, when the yen soared to a record high. Was this primarily due to the

Figure 11.2 **Relative Credit Creation by Federal Reserve and Bank of Japan (Fed — BoJ LLI) and the Yen/U.S.$ Rate**



Source: Board of Governors of the Federal Reserve System; Bank of Japan

Figure 11.3 **Credit Creation by Bank of Japan and Federal Reserve (as measured by Profit Research Center's Leading Liquidity Indices)**



Source: Board of Governors of the Federal Reserve System; Bank of Japan; Profit Research Center Ltd.

policies taken by the Fed, or was it more the result of the policies taken by the Bank of Japan? We know that the foreign exchange intervention of the Bank of Japan, as ordered by the Ministry of Finance, had reached double-digit billion-dollar figures. So surely the Bank of Japan was creating a lot of yen?

To find the perpetrator, we have broken the index into its two components—Fed credit creation and BoJ credit creation (Figure 11.3). We find that the Fed relatively consistently reduced its dollar creation between 1993 and 1996. That alone would tend to weaken the yen. So the yen strength of 1995 was not due to the Fed's actions. A look at the BoJ's credit creation uncovers the smoking gun: Net credit creation by the Japanese central bank dropped sharply from August 1994 onward. The tightening became worse and worse, culminating in the events of March 1995. Despite the painful recession and the desperate attempts by MoF to weaken the yen, the Bank of Japan actually *reduced* credit in this month. It withdrew money from the economy. As our exchange rate model demonstrates, this sudden reduction in yen creation meant that the yen had to strengthen drastically relative to the dollar.

Had the Bank of Japan wished to support government policy and weaken the yen, it would only have had to increase its credit creation. Yet it did the opposite. Since the net credit creation of the Bank of Japan is a policy variable that the Bank of Japan can change at will, we have established that the Bank of Japan was directly responsible for the sudden surge of the yen to ¥79.75/$ on April 19, 1995.

MoF Fooled by Forex Interventions

How could the Bank of Japan get away with such a policy? Again, lack of knowledge of the facts by the Ministry of Finance seems to have been the reason. The bureaucrats of the International Finance Bureau in the Ministry of Finance may have believed that they were firmly in control of exchange rate policy, because they decide the official foreign exchange intervention. Their statements in public, including those by Sakakibara, certainly seem to suggest that. But what actually moves the exchange rate is the net credit creation of the central banks. That is determined by the total sum of all transactions of each central bank. Foreign exchange intervention represents merely one part of this.

When the BoJ was told by MoF to buy U.S. dollars, it went ahead and did so. MoF perhaps assumed that the BoJ would print the yen needed to buy U.S. dollars or U.S. Treasuries and that thus the yen would weaken. But this is not necessarily the case. In simple terms, the BoJ sold government bonds or other paper to investors in the domestic economy and used the proceeds to implement the foreign exchange intervention. Instead of printing the money, it took it from the economy. Economists call such an operation "sterilization."

Since the BoJ's credit creation does not rise under such a policy, the yen will not weaken.[12]

In February and March 1995, when MoF ordered the BoJ to buy U.S. $20 billion worth of U.S. paper, the BoJ "oversterilized" by withdrawing more money from the economy than was needed for the foreign exchange intervention ordered by MoF. Net credit shrank in March 1995, and the yen shot up to its record high.

A replay of the battle between MoF and the BoJ over the yen exchange rate occurred in 1999. Having fallen dramatically in 1998, the yen was widely expected to remain weak in the following year. However, the Bank of Japan withdrew credit from the economy at a record pace. This credit shrinkage strengthened the yen to close to ¥100/$ by the end of 1999, despite new record foreign exchange interventions ordered by MoF. The Bank of Japan again oversterilized them.

Misery Created by the BoJ

Perhaps the Bank of Japan deemed the economy strong enough. In the first quarter of 1995, unemployment had reached a postwar high, creating human misery. The actual number of jobless probably topped five million people in early 1996.[13] That is the size of the whole population of Denmark. Recession-related suicides jumped to a postwar high as well. Meanwhile, the banking system was still in deep trouble. Public money was not forthcoming, as even the bailout of the *tiny jusen* housing loan companies met fierce public resistance. Fiscal stimulation was wasted, as it was not backed by money creation. To pay back the record high debt resulting from it, future generations will be burdened with rising taxes. Meanwhile, the low-interest-rate policy, which could be avoided by increasing the quantity of credit creation, transferred wealth from savers to the banks. The total sum of transferred purchasing power likely exceeded ¥100 trillion—more than the annual GDP of the United Kingdom.

Was the BoJ Afraid of Inflation?

Why did the BoJ for so many years fail to implement the most obvious, simplest, and most suitable policy, namely, to print money? The first explanation might be that the Bank of Japan did not realize it was the right policy. Governor Mieno's declared policy aim in 1990 was to fight asset price inflation. The BoJ might still have been fighting yesterday's war, though the economy was already in the grip of deflation. But this explanation is not plausible. By 1992, it had already become painfully clear that asset prices were falling sharply. Moreover, there was never a danger of consumer price or wholesale price inflation. Inflationary pressures can come about only when credit creation is

pushing the economy beyond its full capacity and when unemployment is at a very low level. But to the contrary, capacity utilization had been falling, inventories were rising, and many factories had been idle for much of the recession. With unemployment at postwar highs, it defies logic to explain the BoJ's tight money policy by a fear of inflation.

Is the BoJ Just Incompetent?

Could the BoJ's policies simply be due to incompetence? If one uses some of the publications by the Bank of Japan as an indication, then one might indeed be tempted to come to this conclusion. Many of its studies use a highly stylized and abstract form of neoclassical economics, which at the same time is based on oversimplifying, counterfactual assumptions about reality. Moreover, BoJ officials have repeatedly published research that claims that the Bank of Japan cannot control the money supply. However, we saw in earlier chapters that while the central bank's injections of funds into the interbank market may be outside its control, this is not true for all its transactions. While these models may well reflect the views of hired economists trained in neoclassical economics, the likelihood is that they are far removed from any decision making or the type of work experience that would familiarize them with credit creation, such as at the Banking Department. The history of the BoJ suggests that the decision makers know very well from five decades of institutional experience that the quantity of credit creation determines the state of the economy and the exchange rate. I, for my part, have met staff members who were not on the research side, and they told me that their economists did not know about the true policy implementation, which is based on credit creation.[14]

BoJ staff would only have to reflect on the successful reflation of 1975, when Japan's first boom-bust recession was ended by aggressive credit creation by the Bank of Japan. The man in charge of increasing the quantity of credit at the time, the head of the Banking Department, was an up-and-coming young central banker named Yasushi Mieno. Central bankers could also have recalled their actions during the even more dramatic banking problem and reflation after 1945.

BoJ Can't Plead Ignorance

There is another reason why since 1991 the Bank of Japan must have been aware of the solution to Japan's looming troubles. In 1990, the United States faced a problem similar to Japan's, in which a boom funded by excessive credit creation had turned into a bust. Huge bad debts paralyzed the banking system. The ensuing credit reduction brought the wheels of the nonfinancial economy to an abrupt halt. In 1991, real GDP contracted by approximately 1 percent. How long this recession was going to last was in the hands of one

institution—the Federal Reserve. It needed to print money. That is what it did, from 1990 onward. Credit creation rose and the United States moved out of the recession faster than expected.

Then the Fed embarked on the second phase of its reflation program—its clandestine bank bailout. It transferred money to banks by helping them create substantial profits in the bond market. Thanks partly to these profits, banks could afford to write off bad debts and begin to create credit again. This way, the Fed quickly reflated the economy. While most observers remained pessimistic until early 1994, the U.S. economy had already fully recovered by 1992. By acting immediately, the Fed had ended the U.S. banking crisis and recession within a year. While the Fed reflated, the Bank of Japan did not. Yet at the time the BoJ studied the Fed's actions in detail.[15] Finally, there are testimonies by leading Bank of Japan staff indicating that they knew early on what the problems were.[16] It is therefore not plausible to argue that the Bank of Japan was unaware that printing money and creating a bond market boom was the right policy to end the recession.

Since its actions were consistent for many years (from 1990 to 1997, with another significant tightening in 1999), there also can be no argument that BoJ policy was just a temporary slip-up. There is no evidence to support the hypothesis of irrationality on behalf of the central bank.

So why didn't the Bank of Japan reflate in 1993 or in 1994? Why did it disrupt the reflation policies of the democratically elected government and its Ministry of Finance? The quantity of credit creation by the central bank is fully decided by the Bank of Japan. The actions of the BoJ do not support the hypothesis that the BoJ wanted to create a recovery. The principle of revealed preference, used by economists, including Bank of Japan economists in their models, suggests that the BoJ has revealed its preference for tight credit creation—and the long recession that it entailed. However, it is hard to believe that the central bank would purposely want to prolong the recession. To examine this issue, it is necessary to go back to the events of the 1980s. These are the root cause of the recession, and they may provide further clues.

12 At the Trigger of the Gun

Who Created the Bubble?

We know that the Bank of Japan pricked the bubble in 1989. We have also found, strangely, that it was the Bank of Japan whose actions prolonged the recession. What was it up to? In our search for answers as to how and why Japan was thrown into economic upheaval, it is now necessary to analyze the root cause of the banking crisis and recession of the 1990s—and that lies in the events of the 1980s. We must next determine just who was responsible for the creation of the bubble.

In chapter 9 we learned that the bubble was due to excessive credit creation by banks. So the question is why banks created so much credit. What determined their behavior? In chapters 5, 6, and 7 we learned that from around 1940 until at least the end of the 1970s, the answer to this question was Bank of Japan window guidance. We know this as fact established by many researchers.[1] But what about the crucial 1980s?

No Window Guidance in the 1980s, Says the BoJ

Some research exists on the monetary policy tools employed by the Bank of Japan in the 1980s, but it ignores window guidance altogether.[2] There is, however, one research paper that directly focuses on window guidance in the 1980s (Hoshi et al., 1991). The authors conclude, "After 1982 and until 1989, window guidance played an insignificant role in the conduct of monetary policy" (p. 9). So it seems we have to look for other factors that influenced bank lending.

However, a closer inspection of the paper by Hoshi and colleagues reveals that their conclusion is not based on empirical research. It is merely asserted.[3] No doubt the source for their assertion is the Bank of Japan itself: In December 1981, the central bank announced that window guidance controls would be abolished beginning in January 1982. Instead of dictating loan growth quo-

tas to the banks, the BoJ said it was going to "respect" their lending plans. In 1984, the BoJ announced the complete abolition of any form of window guidance.[4] Further official pronouncements by the Bank of Japan repeated the message: In 1986, a Bank of Japan official was quoted in the *Nihon Keizai Shinbun* (*Nikkei*) as saying that the central bank "currently is not doing window guidance."[5] In 1988, the Bank of Japan claimed that there had been no window guidance in "a narrow sense" since 1982. It argued that deregulation of interest rates, financial disintermediation, and liberalization had all rendered this policy tool ineffective.[6]

The Bank of Japan even set out to show that credit aggregates were no longer well correlated with economic activity and hence not useful as a tool for monetary policy. The unspoken implication was that window guidance could not have been necessary or even possible, since credit did not seem to be moving the economy anymore.[7]

In March 1991, the BoJ felt prompted to publish another official assessment of the role of window guidance in the 1990s. The report, "The Process of Decision Making and Implementation of Monetary Policy in Japan," was for overseas consumption, since it appeared only in English. It claimed that, "in line with the trend of financial deregulation, window guidance has not been applied in its original form of credit control since 1982, when the Bank of Japan stopped giving individual banks instructions with respect to their lending plans."[8] Soon after its publication, the BoJ spoke its final, though somewhat contradictory, word on window guidance, announcing in July 1991 that window guidance would be abolished immediately.

Would the Bank of Japan Misinform Us?

The Bank of Japan's version of events, that window guidance was not an important policy tool in the 1980s, has never been substantiated by empirical evidence.[9] Furthermore, there are a number of reasons that should make us skeptical of the Bank of Japan's story. First, the very nature of window guidance as an informal policy tool that is based on extralegal sanctions and shrouded in secrecy implies that it is unlikely ever to be fully disclosed in official statements. Second, when Japan joined the OECD, it was obliged to reduce direct economic controls and adopt a market-oriented economic system. Direct credit controls have been criticized by the United States. Therefore the Bank of Japan has had a political incentive to downplay such controls and emphasize market mechanisms. Third, window guidance has a pre-1980s track record of being officially declared "abolished," although in actual fact it either continued unofficially or was reinstituted again soon after.[10] Fourth, the very fact that it was abolished yet again in 1991 suggests that it did exist in a meaningful way previously. Fifth, credit growth has proven to be the cause of

the economic dislocation of the 1980s and ultimately also of the recession of the 1990s.[11] Anybody involved in the determination of aggregate bank credit must be assumed to have an incentive to downplay involvement and degree of control.

Call in the Witnesses

As in a court case, when in doubt, one should call in the witnesses.[12] Cross-examination should establish whether the stories stack up or whether there are contradictions. A starting point for our search for witnesses may thus be a thorough check of the leading Japanese-language financial press. A search of the most highly respected financial newspapers in Japan, the *Nikkei* and its sister paper the *Nikkei Kinyū* (*Nikkei Financial Daily*), uncovered strong evidence that during the 1980s the Bank of Japan continued to implement its window guidance credit controls, completely unchanged from the pre-1980 era. Shown below are summaries of some of the articles that were found:[13]

December 1981: The *Nikkei* reports that the Bank of Japan has introduced a "new style of window guidance," tantamount to the abolition of tight loan growth ceilings. According to the new procedure, the BoJ would from now on "respect" the lending plans of banks. This is "the loosest regulation since 1945." However, BoJ officials are also quoted as testifying that window guidance was "not abolished." One stated that "there is the intention to control lending via direct daily contact with private sector financial institutions."[14]

September 1982: The *Nikkei* finds that despite the official BoJ claim that all bank lending plans are being "respected," voices from the top city banks complain that "the lending plans of the individual banks are not being respected enough" and banks are not allowed to compete freely. If lending plans were fully accepted, then competition among banks would increase and the ranking of the banks would change. However, the ranking of banks by assets remains unchanged.[15]

December 1986: Window guidance quotas tighten. The Bank of Japan is aware of the surge in land prices, the high growth of the money supply, excess liquidity (*kane amari*), and the strong expansion of bank lending toward the real estate sector.[16]

March 1988: Window guidance loan quotas for the second quarter of 1988 are being tightened. The central bank is aware that the fastest-growing segment of bank lending is to real estate and *zai-tech*.[17]

September 1990: "Whenever the actual year-on-year loan growth has not reached the regulated quota, the Bank of Japan has until now reduced the next quota by the amount that was not used up. This resulted in the problem that each bank struggled hard to use up its loan quota, even if this was unreasonable. From now on, the Bank of Japan is studying to abolish this procedure."[18]

June 1991: A bank officer from a "high-ranking city bank" is quoted in the *Nikkei Financial Daily* as saying that a side effect of the window guidance rule of loan increases was that banks "increased lending even when there was no loan demand. And even when there was loan demand, they had to keep [lending] in line with other banks."[19] A bank officer is quoted as saying: "So far, first the total credit amount was decided by the Bank of Japan credit allocation frame, then we decided how to divide that allocation."[20]

Press Sources: The BoJ Misinformed

These testimonies from the respected press clearly suggest that window guidance did exist and that the Bank of Japan, despite public statements to the contrary, continued to impose loan growth quotas on the banks. Moreover, we find that the Bank of Japan continued to engage in qualitative credit allocation, monitoring the use of credit. In particular, the central bank seems to have been aware of the increase in credit creation for speculative financial transactions, especially real-estate-related lending.

If the *Nikkei* and *Nikkei Financial Daily* are correct, then the Bank of Japan misinformed us about the role of window guidance in the 1980s. What could be to its credit is that a few press commentaries hint that it may have used window guidance to slow the bubble, as it "suppressed" loan growth. Could it be that without the Bank of Japan's credit controls the bubble would have been even bigger? Should we therefore be grateful to the central bank for its actions?

Direct Testimonies from BoJ and Bank Officers

In a court case, juries and judges prefer evidence provided directly by eyewitnesses. Window guidance was an elaborate procedure that involved many Bank of Japan officials and an even larger number of bank officers whose job was to liaise with the Bank of Japan (the so-called *nichigin-tan*). Thus a sufficient pool of people exists who can be interviewed regarding the crucial question of the conduct and role of window guidance in the 1980s. However, now that the bubble has created a long recession, and since banks have received public money, it is clear that this question is politically sensitive. Both banks and their regulators have been heavily criticized for their actions. Scandals have highlighted some of the informal links that existed between Ministry of Finance officials and bankers (the "*MoF-tan*"). Many bank staff, and even

some ministry officials, have been arrested and imprisoned. While the role of the *nichigin-tan* has not yet been publicly discussed, it is clear that bankers can be expected to be reluctant to talk publicly about their role. Likewise, many Bank of Japan officials might find it difficult to answer truthfully, as this might force them to implicate their employer or colleagues.

It is therefore fortunate that earlier, in 1992, I conducted a series of interviews with the aim of determining the operation of window guidance in the 1980s. I interviewed twelve Bank of Japan officials who had previously worked as window guidance officers, recording the interviews on tape in some cases and taking notes in others.[21] I also took notes during interviews with six private *nichigin-tan* bank officers from three different banks (as well as different bank types), whose job it had been to talk to the Bank of Japan about bank lending. In 1992, neither the BoJ nor bank employees that I interviewed seemed aware of just how sensitive the question of the role of window guidance would become. Therefore, they appeared very frank and open about the questions asked.

The Jury Is In: Window Guidance Did Continue

The result was unanimous. There was full agreement on virtually all aspects of window guidance among all sources.[22] The central bank and bank officers confirmed to us that window guidance was conducted without interruption during the 1980s, until at least June 1991. It took exactly the same form as the window guidance in the pre-1980 period: The Bank of Japan decided on an aggregate bank loan growth rate for the entire country, and then young BoJ staff calculated on their Excel spreadsheets how this could be divided up among all the bank types (city banks, trust banks, regional banks, etc.) and by individual bank (Fuji Bank, Sanwa Bank, etc.). Those loan growth quotas were then announced to banks all over the country in the quarterly meetings. The quarterly quota was broken into monthly increments, which were also monitored.[23] "When the end of a quarter approaches, it becomes clear by how much the banks have increased loans so far. Thus around that time—for example, toward the end of March—bank people come and talk to their counterparts here at the Bank of Japan and say that they may go over the loan ceiling and want a bigger maximum. Or the BoJ man says to reduce. Thus toward the end of the quarter there is lots of talk here. They come to give reports. We actually call them. We ask them every month how much they have raised loans. If it looks that they have gone over the limit, we tell them, 'Slow it down a bit'" (BoJ officials 5, 6).

The BoJ-Run Loan Cartel

Since banks were oblivious to cost or profitability considerations and instead aimed at market-share expansion, like other war economy industries they

would engage in destructive "excess competition" if left without a cartel. Window guidance continued to serve as the BoJ-run cartel, which carved up the entire credit market among the banks and neatly preserved their pecking order. "The Bank of Japan used the *yokonarabi ishiki* [orientation to stay in line with others] so that the banks will always do what it wants" (bank officer 4). This not only enhanced the power of the Bank of Japan to control credit aggregates, but also was used as a way to make credit controls appear attractive to banks, as only a cartel provided relief from excessive competition: "If it was not for window guidance, we would compete until *harakiri*. This is not good" (bank officer 5).[24] Hence banks would always use up exactly their full window guidance quotas. This meant that the Bank of Japan could determine the precise amount of credit creation and hence economic activity in the country.

The cartel was carved up as follows: "The loan increase quota was always proportional to the previous actual loans. Big banks can increase loans a lot, small [banks] a little. We do it so that bank rankings won't change. Thus no matter how much a bank does in terms of competition, bank rankings do not change at all... There was no free competition" (BoJ officers 5, 6). The quotas were determined according to the ranking of the banks: "For this the BoJ used the following formula: For the main four city banks, for which the volume is similar (Sumitomo, Fuji, Mitsubishi, Sanwa), it was decided first. If they are 100, then from here it was certain how much the others would get: Dai-Ichi Kangyo Bank would be 120, Mitsui and Tokai Banks would get 80. Thus the order is preserved" (bank officer 4). Then the long-term banks and other bank types are decided proportionately: "maybe 100 for Industrial Bank of Japan, 50 for Long-Term Credit Bank, and 30 for NCB" (bank officer 4). However, the Bank of Japan had far-reaching discretionary power to vary the quotas at will and favor some banks over others. So in practice, the precise loan increase quota usually differed for each bank and for each type of bank. At times, loans for some banks did not increase, even when others did.

The informal control of window guidance was also used to punish banks for other forms of "misbehavior," such as when a Nagoya-based bank sacked a Bank of Japan *amakudari* ("descent from heaven"—an ex-bureaucrat who parachuted into a plush private-sector job). The punishment could also take the form of reduced loan quotas (BoJ official 1). "This has actually happened fairly often" (BoJ official 5). The decision regarding such penalties is made by the Bank of Japan official who is in charge of a specific private-sector bank and who therefore wields considerable arbitrary power (BoJ official 6).[25]

BoJ Also Conducted Credit Allocation

In addition to the quarterly meetings, monthly hearings also took place, during which officers from the banks came to the Bank of Japan and explained their

business plans in terms of changes in deposits, loans, and investments in stocks and bonds.[26] "Window guidance was very detailed" (BoJ official 5). The BoJ was aware not only of which sectors received funds, but also of the names of the major firms that did. As a bank officer put it, the BoJ was interested to see "where the money goes for what purpose" (bank officer 3).

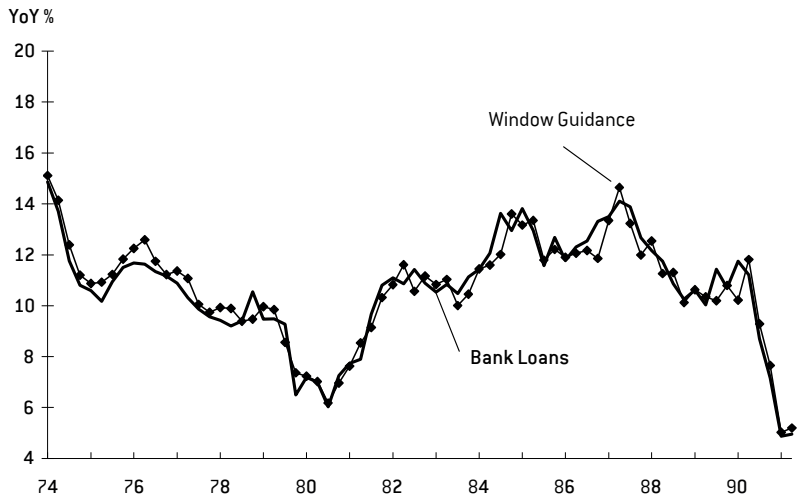
"The Bank of Japan asked how many loans for which industrial sector, how much for short-term or long-term lending, how big is the scale of the borrower, how many loans are demanded by the real estate sector, and so on. Sometimes they ask the names of big customers, for example, Matsushita" (bank officer 4). The loan information was broken down into loans to each industrial sector of the economy, within which it was further broken down to the names and amounts of big borrowers (more than ¥100 million). All of these were subject to detailed scrutiny by the BoJ officials. "In the monthly meetings, important questions are how many nonperforming assets, how many loans to organized crime ('*yakuza* company'), and so on" (BoJ official 5).

Window Guidance Was Binding

The credit controls were highly effective during the 1980s. According to the BoJ officials I interviewed, banks virtually never exceeded the loan quotas set for them, as punishment would follow immediately. "If they went over the maximum, then they would get a lower quota next time. But I have never heard of this. It virtually never happened. Window guidance has been very strictly observed" (BoJ official 5).[27] More surprising and more momentous was the finding that banks also virtually never left their quotas unused in the 1980s (bank officer 2). "Banks *always* went to the maximum of the lending ceiling. The quota was supposed to be digested completely by the banks. If we go below it, our allotment will be decreased compared to our competitors. So we have to eat it all; it's an *o-bento* [Japanese lunch box] to be eaten" (bank officer 2).

The Bank of Japan used the same penalty for exceeding window guidance as for underutilizing it: If banks did not use up their loan growth allocation for more than one quarter, then the bank's future loan quotas would also be reduced. "I have reduced their *waku* [quota] because of this. Maybe not if it happens just once, but if it happens for two quarters, if they don't use it, well, we reduced their allocation" (BoJ official 5). Banks that wanted a bigger quota in the future had to avoid a penalty and demonstrate their "strength" by always using 100 percent of the window guidance quota. "If banks do not go to the limit and do not use up their quota, their loan growth ceiling will be reduced next time. This has been a problem in the bubble [period].... The maximum [loan growth quota] had been very high. Thus banks wanted to reach it; they tried all they could to fulfill it. Banks always strove to reach the maximum" (BoJ official 5).

Figure 12.1 **Bank of Japan Window Guidance and Actual Bank Lending Three Months Later**



Source: Bank of Japan; Nomura Research Institute

Window guidance was extremely effective. We have obtained data from a private-sector research institution that apparently realized the importance of the window guidance quotas and collected all such quotas, even broken down by bank type.[28] Figure 12.1 shows the total window guidance loan quotas for an aggregate of four bank types (city banks, trust bank, regional banks, and long-term credit banks). As can be seen, the window guidance quota is almost identical with the actual aggregate lending of these hundreds of financial institutions. Actual lending closely follows the ups and downs dictated by window guidance. Looking at this astonishing chart, we are prone to forget the fact that a time lag of three months exists between the creation of each data series: Window guidance quotas were announced to each individual bank before the beginning of a new quarter (in late March, for instance). The actual loan figures are only available after that quarter is over (after the end of June; in fact the Bank of Japanwould publish the data with at least a two-month lag, thus in this example not before the end of August). Both series are shown here according to the quarter that they refer to, but the window guidance series is actually known a quarter earlier.

Table 12.1 juxtaposes the quotas and actual results. Needless to mention, the data do not support the hypothesis that window guidance was abolished in 1982 or at another time during the 1980s. The error margin between window guidance and actual bank lending three months later remained minimal. The

Table 12.1 **Window Guidance Loan Growth Quota (WG) versus Actual Loan Growth, 1974–1991 (YoY%)**

	City Banks		Regional Banks		Trust Banks		Long-Term Credit Banks		Total	
	WG	Actual	WG	Actual	WG	Actual	WG	Actual	WG	Actual
1974	11.81	11.86	14.88	14.74	21.54	10.50	12.86	13.01	13.21	12.78
1975	10.41	10.38	12.01	12.00	15.88	5.32	11.39	11.51	11.21	10.80
1976	11.03	11.00	12.52	12.42	19.65	8.53	12.31	11.96	11.95	11.45
1977	9.34	9.13	11.74	11.69	20.14	12.69	10.24	10.16	10.56	10.16
1978	8.86	9.00	10.59	10.89	19.15	13.82	8.14	8.07	9.67	9.64
1979	7.84	7.72	10.69	10.85	15.69	9.29	7.23	7.25	8.93	8.68
1980	6.33	6.62	7.82	8.00	6.90	1.13	6.56	6.81	6.85	6.86
1981	8.31	8.80	9.15	9.18	16.55	11.45	8.59	8.85	8.91	9.02
1982	10.42	10.75	10.59	10.36	25.49	22.82	10.54	10.71	11.04	11.07
1983	10.02	10.37	9.44	9.49	27.36	26.66	10.37	10.22	10.58	10.74
1984	11.50	11.64	11.45	12.12	29.08	29.42	10.50	10.87	12.17	12.52
1985	13.15	13.37	9.84	9.70	26.46	24.71	11.62	12.81	12.63	12.75
1986	13.64	14.19	6.94	6.73	23.9	28.00	11.80	12.01	11.99	12.48
1987	13.97	14.53	10.50	10.23	23.53	21.45	11.77	13.03	13.30	13.54
1988	11.73	11.70	11.02	11.46	9.98	7.72	10.91	10.94	11.31	11.26
1989	10.00	10.28	12.27	12.86	9.19	6.45	9.31	9.93	10.49	10.69
1990	9.39	9.64	11.59	11.51	5.69	2.68	9.21	9.61	9.74	9.70
1991	5.83	5.94	5.45	5.64	-4.03	-8.64	6.02	5.96	5.11	4.92

bank loan market also remained cartelized during the 1980s, as neither the market shares of the various types of banks changed, nor did their ranking by loan volumes.[29]

Since 1980, there has also been a window guidance quota for impact loans—loans denominated not in yen, but in foreign currencies. This quota was more generous. Bank officers said that while they "always used 100 percent" of the yen-based window guidance quota, they only used between 80 and 100 percent of the impact loan quota (bank officer 4). When banks seemed set to overshoot their domestic loan quotas, they could often increase impact loans (i.e., book their loans to domestic clients through a foreign branch, denominate it in a foreign currency, and immediately swap it back into yen). The Bank of Japan condoned this behavior. A Bank of Japan official admitted that this practice encouraged impact loans in particular, and overall loan growth in general.[30]

Window Guidance Used to Raise Loan Growth

We found that during the 1980s, window guidance was hardly a tool to suppress loan growth. Not many banks were keen to exceed the loan growth quo-

tas set by the Bank of Japan. To the contrary, those quotas were often considered too high by the banks: "In the bubble period, we wanted a certain amount [of loan increases], but the BoJ wanted us to use more than that. After 1985, the BoJ said, 'Use more!' Normally, we would not get as much as we want to use.... Especially in 1986 and 1987, for around one year, the Bank of Japan said: 'Use more, because we have a recession.' Window guidance can be used not just to make borrowing smaller, but also to make it bigger. We actually thought, 'This is a little bit much.' But we couldn't leave anything unused of the quota given to us. If we did, other city banks that received a similar quota might beat us. Thus, in order to keep our ranking [among banks] we had to use it all up.... Also, if we got a reputation for being weak, we would get less in the future" (bank officer 4). "Window guidance was a burden for banks, because sometimes we had to lend when we didn't need to and at other times less than we wanted to" (bank officer 5).

Window Guidance: The Number One Policy Tool

From the interviews with BoJ officials and bank officers it quickly becomes evident that the Bank of Japan did not just sanction banks' loan growth plans. Rather, it decided and administered credit growth quotas at its discretion. They took the same form of total control as in the pre-1980s period—indeed, the same form as during the war. Window guidance remained the main policy tool of the central bank. Interest rates were at best a supplementary tool. The Bank of Japan punished banks for overshooting or undershooting the loan growth quotas; it was also aware that competition for rank among banks meant that they would strive to fulfill and not undershoot loan growth quotas even without punishment procedures. As before 1982, qualitative window guidance continued; thus the Bank of Japan was fully aware of and "guided" the increase of loans in real estate, construction, and nonbank financial institutions, in other words, the increase in credit creation that was used for speculative purposes.[31]

Thanks to the BoJ's extralegal window guidance mechanism, the BoJ could almost play the economy like a yo-yo. To accelerate growth, it raised the loan growth quota. To slow growth, it reduced it. Such nearly complete control also bred contempt for other central banks that appeared to be less firmly in the driver's seat. In the early 1980s, for instance, the Federal Reserve apparently had great difficulties with its monetary targeting. Eventually, it capitulated: In 1982 it abandoned M1 targeting and in 1987 targeting altogether, as it felt that it could not control both the price of money (interest rates) and its quantity at the same time. Following the mainstream theories to give preference to interest rates, it seemingly abandoned quantity variables. At the time, Bank of Japan officials were reported to have made contemptuous remarks about the Fed's problems. Unlike the Fed, the BoJ easily managed to control both

the quantity of money and its price: The BoJ set interest rates and, using window guidance, at the same time controlled the creation of new purchasing power, which also determines deposit measures of the money supply, such as M2+CD.[32]

Window Guidance Pushed up Lending

Once the Bank of Japan had informed a bank of its loan growth quota for the next quarter, the bank would then divide it between its various branches, where in turn the branch managers would allocate loan growth targets to their various loan officers. So the entire financial system in Japan was allocating the overall loan growth quota of, for instance, a 15 percent increase into specific targets for each bank type, for each bank, for each branch, for each loan officer. Then, at the end of this credit allocation chain of command, the loan officers in the thousands of branches all over the country were faced with the task of meeting these loan growth targets.

In the beginning, their job was not so difficult. The economy had been in the *endaka* recession of 1985, and there was pent-up demand for money. But their loan growth targets handed down from the window guidance remained high while loan demand by the firms that used money productively had been satisfied, so loan officers increasingly targeted firms that would use money in an unproductive way. They focused on real estate lending. As it became easier for real estate companies to borrow, they began to increase real estate investments. More transactions meant more demand for land. Thus land prices began to rise. This created enormous capital gains for investors. Profits lure copycats. Other real estate firms, then construction firms, and in the end even normal manufacturing firms wanted to get in on the game by borrowing to invest in real estate. With rising land prices, this seemed a sure thing. For each individual bank, it also seemed safe: They had their loans secured by land, considered the safest collateral. The problem was visible only on an aggregate level, when it could be seen that the share of real-estate-related lending in total new loans soared dramatically. When comparing total loan growth with GDP growth, it was obvious that credit was being created and used for unproductive purposes. The land prices were not for real; they had been driven up by the excessive bank lending. A bubble had developed.

But Why Were the Credit Quotas Set So High?

During the war and early postwar era, window guidance allocated credit to priority, productive areas. It also helped to suppress "unproductive" and hence inflationary credit creation. That is how Japan's economy grew so fast in the 1950s and 1960s. In the 1960s and 1970s, we saw that the Bank of Japan warned of the dangers of excessive, unproductive real estate lending, due to the temporary relaxation of the window guidance ceilings. That fueled a real

estate lending boom and produced rocketing asset prices. The BoJ responded by tightening its loan growth quotas. When the excess credit creation was stopped, it turned into bad debts, which produced a bank-centered recession.

Given its experience, it is not surprising to find that the BoJ kept a close watch on real estate-related lending in the 1980s. The Bank of Japan window guidance had become so detailed that not just sectoral loan aggregates were monitored and controlled by the BoJ, but even the names of the main borrowers. The increased creation and allocation of credit for nonproductive and speculative use was therefore known and sanctioned by the BoJ. Yet, instead of reducing its window guidance after 1986, it kept it at very high levels: over 12 percent YoY growth for most years. With GDP growth and hence demand for productive credit being much lower, the BoJ knew that the only way for banks to fulfill these high quotas was to expand nonproductive credit.

Not all BoJ officials agreed with this window guidance policy. The *Nikkei* reported in 1990 that some BoJ officials were complaining that the window guidance system, which punished banks for not using up their loan quotas by reducing them next time, was one reason for the "unnecessarily strong loan growth" in the 1980s, as banks would always use up their loan quota, even when unnecessary. "Put bluntly, one side effect of window guidance was that it spurred the expansion of bank lending during the bubble period," said one Bank of Japan executive.[33] Another BoJ official we interviewed stated that "the BoJ has promoted loan expansion in the bubble period" (BoJ official 5). "If there is no demand for credit [from low-risk borrowers] and we want to use up the quota, the risk gets worse. Thus during the bubble, bad loans rose. The quota became a target for a period of time during the late 1980s" (bank officer 3).

The Plaza Excuse

Could it be that the low interest rate that had been ordered by MoF policies left the BoJ no choice? During and after the negotiations that led up to the Plaza and Louvre Agreements, U.S. Treasury officials put significant pressure on the Japanese officials from MoF's International Finance Bureau to reduce interest rates and, once they had sunk to a record low 2.5 percent, to keep them there for years. When MoF complied with U.S. wishes, the Bank of Japan had little choice but to implement this interest rate policy. Does this not mean that the Ministry of Finance is responsible for the creation of the bubble economy?

To the contrary. During most of the postwar era, interest rates in Japan have been kept artificially low in order to subsidize industry, encourage investment, and increase noninflationary economic growth. In order to prevent inflation and overheating, the Bank of Japan simply engaged in quantity control and allocation of the available funds. With interest rates below those rates that the banks would have set, the credit market was in a constant state of excess

demand—even more so than it usually is. The BoJ then monitored, in every detail, which sectors of the economy were receiving purchasing power and to what use the money was put.

In other words, window guidance is the ideal mechanism to *prevent* high loan growth and slow the economy when it is politically difficult to raise interest rates. In the 1950s and 1960s the BoJ had pursued a policy of artificially low interest rates to support industry, with economic growth kept in check by restrictive credit policies. Reducing window guidance quotas in the face of low interest rates would have been possible; indeed, it had been standard practice in the past. So even if external pressure by the United States and other G7 countries had forced MoF to ask the BoJ to lower interest rates, the BoJ could still have tightened loan growth quotas and thus prevent a bubble. But it raised loan growth quotas, thus forcing banks to lend more, even to unsound projects. Banks felt safe; "even when banks were lending wildly [*nohōzu*], they said that it was okay, because the BoJ said it was okay."[34] This puts the blame for the creation of the bubble squarely on the Bank of Japan.

In their defense, Bank of Japan officials have publicly claimed that they tried to prevent the creation of the bubble by raising interest rates, but they failed to push through a rate rise politically.[35] Indeed, it would have been difficult for the BoJ to raise interest rates, since it was not independently in control of this monetary policy tool. But low interest rates did not create the bubble. It was the window guidance lending quotas that did. And the BoJ could have easily reduced those without any resistance—banks would have preferred lower quotas—and thus it could have prevented the bubble.

The BoJ officials I talked to fully confirmed this: "The Bank of Japan promoted loan expansion in the bubble period.... When one looks back now [to the 1980s], then it was a mistake. My own opinion is: When one reduced the interest rate and reduced the window guidance loan growth limit, then with this policy mix, the bubble would not have developed. But in reality, interest rates were reduced and window guidance was very relaxed. Thus the money supply rose by 10 percent, up to 13 percent. The question why they didn't close the window guidance more is extremely puzzling.... All the banks tried to use their loan growth quota to the maximum and did all they could to give out loans. But the loans did not go to normal corporations, such as steel, automobiles, but instead to construction, non-bank financial institutions [which engaged in real estate speculation]. This became the bubble" (Bank of Japan official 5).

Bank officers took the same view: "I worried a lot about the policy of the authorities.... If they had taken a little tighter policy in the window guidance, this kind of phenomenon, the bubble, would have been prevented.... If the Bank of Japan had wanted to tighten, it would have achieved a lot" (bank officer 2).

It is indeed puzzling why the Bank of Japan, for almost five consecutive years, in the face of already exploding real estate prices, and despite its public

protestations that it was worried about a bubble, continued to set outlandishly high loan growth quotas for Japan's banking system. Not only did the BoJ have the benefit of the experience of the 1970s bubble, but in the 1960s, researchers had already identified the Bank of Japan's window guidance as the source of excessive credit growth and argued that this could not simply be blamed on the banks: Placing the blame on "the 'excessive' competition of city banks in extending loans resulting in an overly rapid expansion of credit is a misplacing of the responsibility for credit control. It is the duty of the Bank of Japan to control the amount of credit creation by commercial banks;... The excess lending [of the 1950s] was the fault not of the banks trying to maximize profits, but of the Bank of Japan for allowing such credit expansion to take place."[36]

Clearly, pleading ignorance is implausible for those at the Bank of Japan who decided the credit quotas and could look back on decades of experience with them. It is impossible to avoid concluding that these decision makers must have been aware they were creating a bubble.

Hiding the Smoking Gun?

Window guidance was suddenly abolished in July 1991—apparently in a rush. Bank of Japan officials said that window guidance was abolished at such short notice that it took the window guidance officers themselves by surprise. Hearings still took place in June, and Bank of Japan officials were preparing the window guidance quotas as usual, when the abolition was announced and they suddenly ceased their work. No reasons were given to Bank of Japan window guidance officers (BoJ official 5).

Bankers were equally surprised, indeed often left almost helpless: Soon after the abolition of window guidance, bankers complained that they did not know how to make their lending plans anymore: "So far, first the total credit amount was decided by the BoJ credit allocation quota, then we decided how to divide that allocation." Until then, "when a certain branch said they would like to lend more, we could respond that the window guidance quota was used up—now we won't be able to do that anymore."[37]

The official reason given to the public for the abolition of window guidance was that it had become increasingly ineffective due to financial deregulation. But none of the interviewees felt that window guidance was abolished because it did not work. It worked very well. Neither bankers nor BoJ officials really knew the real reasons for its abrupt abolition.[38]

Perhaps there is a different explanation. Window guidance created the bubble and then pricked it, and hence ushered in the recession of the 1990s. Indeed, over the entire postwar era, the window guidance loan growth quota was the single most important economic variable. It is the smoking gun, the possession of which would make it easier to identify the perpetrator. We therefore need to find out just who was holding the gun and pulled the trigger.

The Princes of the Yen

It was the Bank of Japan that ended the bubble by suddenly tightening window guidance in June 1989 and then created the recession of the 1990s.[1] It was the Bank of Japan that prolonged the recession, for although it could have ended it as early as 1992 or 1993, the appropriate reflationary policies were not taken for a decade. We have also found the ultimate cause of the crisis of the 1990s—the window guidance credit control mechanism, which created the bubble of the 1980s. Once again, it was controlled by the Bank of Japan. Thus Bank of Japan policy was the cause of bank lending, GDP growth, and asset price movements over the past two decades.[2] But who decided Bank of Japan credit policy?

The Bank of Japan has done little to illuminate this point. To the contrary, it has made misleading statements about the role of window guidance in the 1980s. Moreover, it implemented several reorganizations of its bureaus. In 1997, the Credit and Market Management Department was split into the Financial Market Operations and Surveillance Department. Another reorganization took place in April 1998. By this time, the tasks of the former Banking Department had been split between the Operations Department, the Financial Markets Department, the Financial and Payment System Office and the Bank Supervision Department. It had become a little harder to locate the center of the credit control policies.

MoF Had No Influence over Window Guidance

Sometimes observers suggest that the banks had such a strong lobby that they could influence, if not dictate, the window guidance loan quotas.[3] But in our interviews Bank of Japan officials were adamant that the banks were on the receiving end of window guidance and did not determine the window guidance loan quotas among themselves. "I have no knowledge of banks deciding [their loan quota] by themselves" (Bank of Japan official 3). Bank of Japan officials were unanimous in their opinion that window guidance quotas were set in a "one-way" process that did not involve the banks. It was "like an order," and the decision was made exclusively by the Bank of Japan (Bank of Japan official 7). Who gave the orders?

Many observers of postwar Japan are convinced that the Ministry of Finance not only was legally in charge of all economic affairs, but also made all key decisions. They therefore feel that even credit controls must ultimately have been under MoF's supervision. This is certainly what the old Bank of Japan Law, in force until April 1998, would suggest. It has been established by many researchers, however, that this was not the case in the 1960s and 1970s. Although the Bank of Japan lost the first power struggle with MoF in the 1950s and early 1960s, it retained actual power over the economy thanks to its control over window guidance. But what was the situation in the crucial 1980s?

The Bank of Japan officials I interviewed said that the decision on the official discount rate (ODR) was indeed influenced by the Ministry of Finance: "The official discount rate ... is decided by the Planning Department [of the Bank of Japan] after collecting information from the Research and Statistics Department and the Banking Department. Then the Ministry of Finance is consulted.... Its influence is very strong.... Sometimes the Ministry of Finance canceled [a change in] the discount rate. There is also a policy board [at the Bank of Japan], but in reality it is [decided by] the Bank of Japan Planning Department and the Ministry of Finance Banking Bureau together. But this is all quite secret" (Bank of Japan official 7).

However, we know that interest rates, including the official discount rate, were not important in the creation of the bubble. Window guidance is a different matter. Concerning window guidance, Bank of Japan officials said that "the decision... is totally different [from the decision about the official discount rate]" (Bank of Japan official 7). "The total loan increase was decided by the *kyokuchō* [the chief of the Banking Department of the Bank of Japan], who also decided the *warifuri* [allocation among banks]. The decision about the official discount rate is different, as here the Ministry of Finance may intervene, sometimes delaying or canceling an ODR move attempted by the Bank of Japan" (Bank of Japan official 6).

The commercial bank staff who were on the receiving end of window guidance also felt that the Ministry of Finance was not involved: "We don't know how the window guidance ceilings are decided. But we did not have the impression that the Ministry of Finance was behind this" (bank officer 4). Interviews with Ministry of Finance officials confirmed this finding, which is also supported by the literature on the pre-1980s era.[4]

The Bank of Japan Lets MoF Reign, Not Rule

Even before the 1980s, authors agreed that window guidance "is rather free of Ministry of Finance interference because the process of establishing ceilings poses a number of technical problems and because the details of the opera-

tions are kept quite secret."[5] Another researcher concluded: "Whereas MoF can by law determine the central bank's discount rates, it cannot determine the content of window guidance. Nor can politicians or business executives easily intervene. Secrecy, which the bank invokes in the exercise of both window guidance and penalty rates until some months after policy is implemented, also keeps MoF at arm's length."[6]

It is therefore not surprising that by the 1980s, MoF's awareness of even the role of window guidance had further dimmed. As we have seen in chapter 6, the central bank used several smoke screens to distract critics and rivals from its true control tool. It argued that it undertook no credit allocation, that window guidance was merely an informal and voluntary consultation process with the banks, that window guidance was not an effective tool, and (since 1982) that it had practically been abolished and had become irrelevant. In its official publications, the BoJ has for the past two decades claimed that its policy is conducted by targeting interest rates.[7] As a result, during the 1980s the Ministry of Finance never even attempted to take hold of the most important control tool over Japan's economy.

MoF did have influence over interest rates and thus erroneously believed itself to be in control of monetary policy. Had it known the truth about window guidance, it could have usurped this power tool. The Bank of Japan apparently played its part well, since any Ministry of Finance influence over interest rates was commented on bitterly as unjustified interference. In reality, the central bank must have been happy to cede control of rates to MoF while maintaining control over the economy through window guidance. This is why a high-ranking BoJ official could state truthfully that despite the old Bank of Japan Law that gave the government and its Ministry of Finance supervisory authority over the central bank, "the powers of order [of the Ministry of Finance] have never in fact been used. In reality, the management of monetary policy is carried out under the responsibility of the Bank of Japan from an independent point of view."[8] Even in the 1980s and 1990s, the central bank let MoF reign. But the Bank of Japan ruled.

So Who Exactly Created the Bubble?

If the decision concerning the window guidance loan quota was made at the Bank of Japan, then who exactly made it? The window guidance loan quota had an impact on everyone in Japan and on many more people all over the world. Whoever decided window guidance was effectively in control of Japan's economy, as much as Hjalmar Schacht ruled over Germany's economy for much of the 1920s and 1930s. Who, then, was this credit dictator?

The window guidance officers often had great discretion in setting the loan quota for specific banks. This was especially the case in the regions: "For the

secondary regional banks, the window guidance officers in the branches have to decide which specific bank lends how much" (Bank of Japan official 6). However, "the loan growth increase quota handed out in the branches came from the BoJ headquarters, although that is not very detailed. For the city banks it is split up by bank [already from the beginning]" (Bank of Japan official 6). So, while BoJ staff had some leeway in deciding loan growth targets of specific, smaller banks, they had to work within a given total loan growth quota for each bank type. Moreover, for city banks, the loan growth quota had already been determined and the window guidance officers merely handed down the orders given to them by their superiors in the Banking Department.

Who decided the overall loan growth quotas for the various bank types and city banks? And who decided the single most important variable for Japan, the countrywide overall loan growth quota? "First it was decided by what percentage the total loan volume in the country should rise.... The *kyokuchō* [director of the Banking Department] decides the total increase.... Then this was divided among the different types of banks and individual banks [*warifuri*].... The city banks are decided first" (Bank of Japan official 7).

We find that the head of the Banking Department was responsible. But how did he make that fateful decision? Bank of Japan officials were at a loss to explain the precise process. "It is not quite clear how the total countrywide loan growth increase is decided. They look at money supply, GNP, prices. But I don't know what they use. There is no decided formula. I can imagine that they decide how much the money supply should change" (Bank of Japan official 5). Furthermore, did the director of the Banking Department make the decision himself, or did he merely receive orders from the top ranks of the Bank of Japan, such as the governor?

Did Governor Sumita Create the Bubble?

The person officially responsible for the central bank's policies is, of course, the governor. During the vital years from December 1984 to December 1989, when the bubble was created by window guidance, Satoshi Sumita was the governor of the Bank of Japan. Sumita had not risen from the ranks of the Bank of Japan to this position. He was one of those *amakudari*—a senior Ministry of Finance official who had retired from the top career post at the ministry. It is tempting to blame Sumita for the creation of the bubble. Indeed, when Sumita stepped down in December 1989 and Yasushi Mieno took over, the Japanese press told the story that Mieno, the "trueborn" central banker who had risen through the ranks of the Bank of Japan, disliked the policies of his predecessor and thus implemented a radical U-turn in monetary policy. In fact, in his first press conference as the twenty-sixth BoJ governor, Mieno said that since the previous policy of monetary easing had caused the land price

rise problem, real estate-related lending would now be restricted.[9] In an interview with the *Nikkei Financial Daily* three days after becoming governor, Mieno stated, "It can be said that financial institutions should not lend strength to land speculation. Besides, such activities lead to the loss of soundness of the banking system. Although we have already asked financial institutions to strongly control and restrict themselves, I think that I would like to request further self-control and self-restriction also from now on."[10]

The Myth: Change of Governor, Change of Policy

The media certainly had a good story: Mieno, newly in charge of the economy, resented the easy money policy of his MoF predecessor and the rapid appreciation of land prices it had produced. Once in power, he acted swiftly, making him a legend in his lifetime. Mieno, the warrior against asset inflation, a modern-day Robin Hood and hero of the underdog, was on a mission to burst the bubble and bring down the greedy real estate speculators who had split the nation into the haves and the have-nots (one of Mieno's own phrases). Then, in 1990, Mieno surprised the establishment by engaging in a rare high-profile disagreement with the Finance Ministry over monetary policy. The ministry opposed monetary tightening, but he stuck to his tight money guns throughout his time as BoJ governor. So, when his five-year term was up in December 1994, MoF installed another of its alumni, Matsushita, as the new governor.

So far the legend. But was Sumita really in control of BoJ monetary policy, when he was governor during the bubble years? Did Matsushita, another MoF alumnus, really make BoJ policy during his term as governor from 1994 to 1998? This can easily be found out by establishing whether Sumita and Matsushita were in charge of the credit creation policies of the Bank of Japan. First, Sumita's case; here, the key question is whether he was in charge of the window guidance loan quota.

Window Guidance Not Decided by Sumita

Two regular meetings were convened at the Bank of Japan at which, at least officially, central bank policy was made: the Policy Board meeting and the Executive Board meeting. The Policy Board has always rubber-stamped what had previously been decided at the more important Executive Board meetings. At these, the executive directors of the Bank of Japan convened with the governor and vice-governor. In February 1987, the Executive Board decided, under MoF pressure, to reduce the ODR to the low rate of 2.5 percent. One would therefore assume that it would also decide the more important window guidance loan quotas. I investigated by interviewing a senior individual who was a member of the BoJ Executive Board during the all-important years from 1984 to 1989.[11] I asked him whether the window guidance loan quotas were

discussed or decided at the Executive Board meetings. He told me that the meetings revolved around setting the official discount rate and the call rate in the short-term money markets. Window guidance loan growth quotas were never decided at those meetings, and they were hardly ever mentioned.

Could Governor Sumita have made the decision about the window guidance loan quota outside the meeting? Hardly. From my interviews I found that Sumita was not even remotely aware of the role and importance of window guidance policies during the 1980s, nor did Bank of Japan staff brief him about it. Sumita, although officially governor of the Bank of Japan, was not party to the key decision, namely, the determination of window guidance.[12] While he is often blamed for the bubble, and has himself been willing to accept responsibility for keeping interest rates too low, no BoJ staff member had ever explained to him why window guidance was set at such high growth rates during the late 1980s.

MoF Governors Excluded from Decision Making

Sumita turns out to be not an exception but the rule. We saw that in early 1995 the Ministry of Finance was desperately trying to stimulate the economy, yet the Bank of Japan reduced its credit creation, thus worsening the recession and sending the yen to ¥80/$. However, at the time the governor of the Bank of Japan was also an "old boy" from MoF—Matsushita. I have gathered testimony from a close associate and confidante of Matsushita, who handed on some of my research reports on credit creation to the governor. He later reported back to me that the governor had read them and, since he had noticed that staff would never brief him about the quantity of credit creation, had subsequently inquired with Bank of Japan staff about the "quantitative policy" and how the quantity of money could be increased. BoJ staff had argued that the central bank could not control the quantity of money and directed the discussion to the topic of interest rates. Further inquiries were rebuffed with technical jargon and the hint that such matters were complicated and needed to be left in the hands of the expert (trueborn BoJ) officers.

If Sumita did not decide window guidance, and the BoJ did not tell Matsushita about the amount of credit creation, then neither of those two actually controlled the Bank of Japan or determined Japan's monetary policy. Researching further into previous ex-MoF officials who had become governors of the Bank of Japan, a consistent pattern could be established. The finding: Whenever a Ministry of Finance man was appointed governor of the Bank of Japan, he was excluded from the key control mechanism—the quantity of credit creation. That was decided by junior trueborn Bank of Japan staff who did not report to the governor. The public has been misled about who really governs the Bank of Japan.[13]

Yes, Mr. Governor

Who, then, was actually in control? Who decided the window guidance of the 1980s and the restrictive credit policies of the 1990s? It is well known that the Ministry of Finance and the Bank of Japan have been alternately putting forward their candidate for central bank governorship. This tradition started in 1974, when trueborn BoJ governor Sasaki was succeeded by the ex-MoF man Morinaga. Upon completion of his five years in 1979, another BoJ man became governor: Maekawa. In 1984, when his five years were up, the ex-MoF man Sumita became governor. His successor in 1989 was the trueborn BoJ man Mieno, who in 1994 was succeeded by the ex-MoF man Matsushita. This system had appeased the Ministry of Finance, as it seemed to suggest some kind of power balance in monetary policy making between MoF and the BoJ. Together with MoF's influence over the official discount rate, this arrangement appeared to give MoF plenty of control over monetary policy.

Many observers therefore felt that BoJ policies were a reflection of whether a MoF or a BoJ man was governor: MoF is known to advocate tight fiscal policy and thus prefers monetary stimuli. Trueborn BoJ governors would adopt tight money policies and advocate fiscal stimulation. Indeed, without the alternating switch in governors, it seemed impossible to explain the roller-coaster monetary policy of the 1980s and 1990s, that featured the most dramatic reversals in postwar history. MoF man Sumita appeared to have created the bubble, while BoJ man Mieno burst it.

However, the real story is different. Whenever a Ministry of Finance man become governor, we found that he would be systematically excluded from the key discussions, those involving the quantity of credit creation. A BoJ officer would be appointed whose sole job was to "assist" the ex-MoF governor, who was not familiar with central bank operations. This assistant would give the governor the feeling of being in charge. In actual fact, his job was to shield the governor from the vital credit information.

A well-informed *Nikkei* reporter once explained: "The key person besides the deputy governor is the manager of the governor's office [*sōsai hissho yaku*]. He goes wherever the governor goes, whether inside or outside the Bank of Japan and, as 'stage prompter,' judges all the affairs of the governor. This even includes the personal affairs of the governor.... What is noteworthy about the manager of the governor's office is especially his role when someone who is not a trueborn BoJ man becomes governor. Then, although the Bank of Japan denies this, there is indication that he takes on the role of 'watcher,' who sees to it that the governor does not deviate from BoJ policy.... For instance, Iwane Maru, who was manager of the governor's office when the ex-Ministry of Finance official Satoshi Sumita was governor ... took a liking to Sumita, did not fully carry out his 'duty' of keeping him under close surveillance, and it is thus

said that he was replaced. Whether true or not, this position is so sensitive that rumors such as these circulate."[14]

Table 13.1 lists the governors and deputy governors (as well as a few additional relevant appointments). What is not immediately visible when reading this list of alternating MoF and BoJ governors is that there is far greater consistency in personnel. When Masamichi Yamagiwa from MoF was governor in the early 1960s, his deputy governor from 1962 was Tadashi Sasaki, a BoJ insider. In 1964, the governor was replaced by another outsider, Makoto Usami. The deputy governor, however, remained Tadashi Sasaki, who kept this job for seven years. Then when Governor Usami resigned in December 1969, the new governor was Tadashi Sasaki.

In December 1974, after another five years as governor, Sasaki handed over the governorship to MoF man Morinaga. The deputy governor during this time was Haruo Maekawa, a BoJ insider. When Morinaga's time was up, the new governor was Haruo Maekawa. In December 1984, Maekawa handed over the governorship to MoF man Sumita. His deputy was Yasushi Mieno. After five years, Sumita handed over his governorship to the same Yasushi Mieno. In 1994, Governor Mieno was followed by MoF man Matsushita. The deputy position went to BoJ insider Toshihiko Fukui.

What we learn from this chronology is that a governor hailing from MoF stayed only for five years. And during his tenure, his deputy would always be a born-and-bred BoJ man, who then happened to become the next official governor. A deputy governor hailing from the BoJ would always become the next governor. If we now add our finding that governors coming from MoF were shielded from the key decision making, we arrive at a momentous conclusion. Although the Bank of Japan Law limits the tenure of the governor to five years, throughout the postwar history, the trueborn Bank of Japan governors had control for at least ten years each; first as deputy governor, then as governor. And after the end of the ten-year term of the BoJ insider, another BoJ man would take over, for another ten years. Born-and-bred BoJ governors were in charge all the time. For sake of public appearance, a MoF man would be invited in intervals as official figurehead.

Sasaki, Maekawa, and Mieno all followed up their five-year tenure as deputy governor with another five years as governors. Thus tidying up the table by dropping the figurehead governors that hailed from outside the BoJ, we quickly see the key decision makers of postwar monetary policy in Japan (we have also included the unusual period where Ichimada was even minister of finance; see Table 13.2).

We found that the actual BoJ leaders ruled for at least ten years each. So the number of people who controlled Japan's money in the postwar era is truly a small one. Since Japan's capitulation and until early 1998, twenty-four different individuals have held the office of prime minister. But over the same

Table 13.1 **Bank of Japan Governors and Deputy Governors**

	Governor	Deputy Governors	Banking Department Head
Mar 1944	Keizo Shibusawa		
Aug 1945		Eikichi Araki (BoJ)	
Oct 1945	Eikichi Araki (BoJ)		
Jun 1946	Hisato Ichimada (BoJ)		
May 1947	" "	Teiichi Kawakita	
Jun 1949	" "	Kichio Futami	
Jun 1954	" "	Toshio Inoue	Tadashi Sasaki (Apr 51–Sept 54)
Dec 1954	Eikichi Araki (BoJ)		
[Jul 1957–Jun 1958	*Ichimada Finance Minister]*		
Nov 1956	Masamichi Yamagiwa (MoF)		
Jun 1959	" "	Tsutomu Taniguchi (BoJ)	
Apr 1962	" "	Tadashi Sasaki (BoJ)	
Dec 1964	Makoto Usami (Mitsubishi)	" "	
Dec 1969	Tadashi Sasaki (BoJ)	Tsuichi Kono	
Dec 1974	Teiichiro Morinaga (MoF)	Haruo Maekawa (BoJ)	Yasushi Mieno (Apr 75–Feb 78)
Dec 1979	Haruo Maekawa (BoJ)	Satoshi Sumita (MoF)	
Dec 1984	Satoshi Sumita (MoF)	Yasushi Mieno (BoJ)	Toshihiko Fukui (Sept 86–May 89)
Dec 1989	Yasushi Mieno (BoJ)	Hiroshi Yoshimoto (MoF)	
Dec 1994	Yasuo Matsushita (MoF)	Toshihiko Fukui (BoJ)	
April 1998	Masaru Hayami (BoJ)	Yutaka Yamaguchi (BoJ)	

Table 13.2 **The Six Postwar "Princes"**

Time Period	"Trueborn" BoJ Staff as Governor/Deputy Governor
Aug 1945 – Jun 1946	Eikichi Araki
Jun 1946 – Dec 1954	Hisato Ichimada
Dec 1954 – Dec 1956	Eikichi Araki
[Dec 1954 – Dec 1956, Jul 57–Jun 58	*Hisato Ichimada (Minister of Finance)]*
Apr 1962 – Dec 1974	Tadashi Sasaki
Dec 1974 – Dec 1984	Haruo Maekawa
Dec 1984 – Dec 1994	Yasushi Mieno
Dec 1994 – Feb 1998	Toshihiko Fukui

time span, Japan's money was controlled by only six: Araki, Ichimada, Sasaki, Maekawa, Mieno, and Fukui. Since Araki's tenure basically overlaps with Ichimada's (Governor Araki sparred with Ichimada during the latter's time as minister of finance), one could perhaps say that five people controlled Japan's money. If we focus on the crucial time period from 1962 to 1994, we find that over those thirty-two years only three people had held the control levers in their hands: Sasaki, Maekawa, and Mieno. The public was kept busy voting politicians in or out of power. Meanwhile, those who determined the state of the economy remained firmly in control. They decided, without democratic checks and balances, who would get money and who would not, whether the economy would move into recession or recovery, and essentially how many people would be unemployed and how many would have jobs.

How Are Japan's Rulers Selected?

Politicians are voted into power through elections. But how are the rulers over Japan's economy selected? We know that a trueborn BoJ governor has previously been deputy governor. Several other common features can be found. Before becoming deputy governor, he holds the position of executive director. There are only six executive directors from the BoJ at any moment in time.[15] This means that among the fewer than fifty or sixty university graduates accepted by the BoJ on the career track each year, only around one can hope to be appointed executive director. The odds of becoming deputy governor (and therefore automatically governor) are much smaller, of course, since only one person takes the job in a decade. If, over ten years, say, five hundred new staff are employed by the BoJ, only one of them will be able to advance to the top job more than thirty years later.

Given such odds, one would assume that fierce competition during the years between entering the Bank of Japan and becoming governor would ensure a fair and objective selection procedure. Having proven themselves over the years through outstanding ability, a number of potential candidates

would emerge. As they moved up the hierarchy and more competitors were eliminated, their number would fall until a handful of candidates remained as potential governors—those who had consistently demonstrated superior intellectual qualities and outstanding job performance. From this short list, a final choice could then be made when the time arrived to appoint the governor. Such a selection procedure would be considered suitable and fair for most businesses and bureaucracies.

Not so at the Bank of Japan. The ruler over Japan's economy was not determined according to any such procedure. We should not be surprised. Given the far-reaching power of the top BoJ man, the selection procedure was more likely to be similar to how dictators tend to choose their successors. The ruling dictator would want to hand over power only to somebody loyal to him and in agreement with his goals and aims. Instead of merit and ability, the primary criteria for selecting a successor would be loyalty and the sharing of common goals. To cultivate his loyalty, the successor would have to be nominated fairly early on as the heir to the throne, so that he would in turn feel indebted to his mentor and repay him by following his policies.

Of Popes and Princes

That is how Japan's monetary rulers were appointed. Since Japan capitulated and did not have sovereign rule over its country until 1952, the first two central bank chiefs were virtually nominated by the U.S. occupation. The first of America's men on the BoJ throne was Eikichi Araki, who had been head of the crucial Banking Department during the establishment of the wartime system from 1939 to 1942. Immediately following Japan's defeat in August 1945, he was appointed deputy governor of the Bank of Japan. Two months later, he was appointed governor. However, as with many members of the Manchurian elite, in June 1946 he was indicted by the war crimes prosecutors and had to resign. General MacArthur successfully used the threat of severe punishment (including the death penalty) to turn the majority of the Manchurian war economy elite into lifelong friends of the United States.[16] In 1951, the prohibition on suspected war criminals filling public offices was removed. Only a year later, Araki reemerged, among a large crowd of colleagues from the total war economy era, to take up one of the highest positions available in public office at the time—in 1952, Araki was appointed ambassador to the United States, almost straight from being under investigation for war crimes. This move was extraordinary also for another reason: It was obviously the most important diplomatic post. It is telling, then, that it went not to a trained Foreign Ministry official or politician, but to a central banker. Clearly, America placed highest importance on its close connection to the central bank.

When Araki left for Washington, another trueborn BoJ man was appointed to take over from him: the next in the line of succession, Hisato Ichimada.

As we saw, he had already proven his mettle during the era of the National Financial Control Association. We have heard already in chapter 6 why he was known as "the Pope." His "infallible" decrees about who would or would not receive money ruthlessly controlled the economy for eight and a half years, from June 1946 to December 1954, while his mentor Araki oiled the communications pipeline from Washington. In 1954, as the U.S. occupation administration had only recently ended, the United States apparently thought it wise to send their man back to Tokyo. There he was put straight into the driver's seat: Araki switched surprisingly smoothly back from U.S. ambassador to central banker and controlled Japan's economy again as BoJ governor from 1954 to 1956.

Meanwhile, Ichimada had done good work and was rewarded by the equally surprising appointment as minister of finance—the only trueborn BoJ man to take this job in the postwar era. As finance minister from December 1954 to December 1956 and again from July 1957 to June 1958, Ichimada led the first, unsuccessful campaign by the BoJ to change the central bank law and gain full legal independence from the Ministry of Finance.

After this attempted coup d'état by the Bank of Japan had failed and MoF had reasserted itself, the BoJ temporarily lost the upper hand on the political level. The "compromise" of alternating governors from MoF and the BoJ suited the BoJ insiders, as it minimized MoF's influence on monetary policy, while it provided a democratic fig leaf.

Thanks to this system, Araki and Ichimada could put forward their chosen successor. That was not somebody who had been selected through years of fair and open competition among Bank of Japan staff. It was somebody who had been loyal to Araki and Ichimada and their ideas: Tadashi Sasaki. Ichimada had let it be known early on in Sasaki's career that he was their chosen heir. Thus he was known as "the Prince" from a young age, "so much so that there was nobody who doubted that he would become governor," said a former Bank of Japan staffer who worked with him.[17] Even when he was a young Bank of Japan staffer, Sasaki's colleagues would whisper in awe about him that he was waiting in the wings to become governor of the Bank of Japan. Such early selection did not give others a chance to move to the top job based on merit.

Prince Sasaki Begets Prince Mieno

Sasaki's career, as so many postwar careers in Japan, received a boost during wartime. Just before the outbreak of war, the government summoned a group of young elite bureaucrats and businesspeople to form the "Total War Research Institute," whose purpose was to create a "mock cabinet" to simulate the various policy options during the looming war. Already then young Sasaki

represented the Bank of Japan by playing the "mock central bank governor."[18] Araki and Ichimada had taken note of this young man during the war, and in the postwar era they swiftly moved him up the ranks to the key posts. His contemporaries at the Bank of Japan could see from this special treatment that he had been anointed for a higher calling. After heading the Planning and Personnel Departments, the prince was introduced to the secrets of window guidance as head of the Banking Department. He held that key post for three and a half years, from April 1951 to September 1954, longer than anyone before or after him in the postwar era. In this function, he administered Ichimada's strict credit allocation regime and worked as his right-hand man. This was also the time when the modern-day window guidance mechanism received its final shape.[19] After this, Sasaki was appointed executive director and, in 1962, became the de facto head of the Bank of Japan as deputy governor and then governor.

Sasaki's rule was as ruthless as that of Ichimada. He adopted the autocratic decision-making style of his mentor, and it seems that he was feared even by his trusted followers.[20] Although on paper all executive directors had some say in monetary policy, in practice no member of the Executive Board could raise an opinion that differed from Sasaki's without the risk of damage to their career or their chances of securing a good retirement job. This was not to say, however, that Sasaki did not discuss his policies with anybody; his mentor Ichimada was still alive and acted as éminence grise in the background. Moreover, Araki and Ichimada had also chosen Sasaki's successor, who looked up to Sasaki as his senior and was his close and trusted ally. That was someone called Haruo Maekawa.[21]

When Sasaki was head of the Personnel Department, he was in charge of selecting applicants to join the Bank of Japan. As the anointed heir to the throne, Prince Sasaki was given the chance to select a future governor of the Bank of Japan, in succession to Prince Maekawa. Among the intake of the year 1947, there was a young fellow who stood out: Yasushi Mieno. He stood out not because he had the obligatory qualifications of having graduated from the First Higher School and the Law Department of Tokyo University. Until entering Tokyo's top high school, Yasushi Mieno had been raised in Manchuria, where his father was a top bureaucrat in the Manchurian Railways, the center of the wartime economic system set up and run by the Japanese. These were good credentials for any war economy bureaucrat such as Sasaki, and at the Bank of Japan the right family background has always been an important selection criterion.

Young Mieno appeared ambitious and keen to rise to the top. However, he was not familiar with the true power structure of Japan and naively believed that the top job could be obtained by joining the Ministry of Finance. When asked by Sasaki about his career preference, Mieno apparently put the Bank

of Japan second, after the Ministry of Finance. We don't know what Sasaki told Mieno, but we do know that he managed to convince him to join the Bank of Japan instead. Sasaki soon made up his mind that he would anoint Mieno as the next prince, who would, like himself in his early years at the central bank, rise through the ranks on the fast track.[22]

When Ichimada was minister of finance, Mieno was sent abroad to be closer to the most powerful central bank of the world: From 1958 to 1960 he was posted in New York. There, as a young staffer in the small BoJ office, he could not fail to become close to his boss, the head of the BoJ New York mission. That was none other than Haruo Maekawa, the next in line after Sasaki to "run" Japan. No doubt, Maekawa used this opportunity to introduce Mieno to the important people, such as the head of the New York Federal Reserve, the U.S. Treasury, and key Wall Street figures.

Mieno's first big challenge upon his return to Nihonbashi, the Tokyo quarter where the central bank is located, arrived with the stock market slump of the 1960s. That slump of course did not take the Bank of Japan by surprise, since it had triggered it through its sudden tightening of the window guidance loan quotas. Mieno was appointed section head at the planning department and was involved in organizing the unprecedented direct liquidity injections to bail out the troubled Yamaichi Securities.[23]

Sasaki's Exclusive Circle

The exclusive group surrounding Sasaki consisted of his predecessor and his two successors Maekawa and Mieno—the princes of the yen. The decision-making circle was so small that even other executive directors would often be excluded from consultations. They were not the only ones left out of the loop: During Sasaki's first seven years in charge, his official title was only deputy. The governors were ex-MoF man Yamagiwa and his successor Usami, who hailed from the private sector. Despite being governors, they were not part of Sasaki's circle. This exclusivity was so obvious that many members of the executive board resented it and one of them even criticized it in public—an unprecedented step.[24]

After five years as deputy governor, Sasaki added another five years of rule as the official governor, controlling the fate of Japan's economy for a full twelve years. After this, he handed over the reigns to Prince Maekawa, as had been planned. But apparently he was not keen to give up power. During his entire first term from 1974 to 1979, Deputy Governor Maekawa had to consult with Sasaki about the credit policies to be taken.[25] Sasaki's influence remained large. Takeshita, the leading LDP power broker who retired only in 2000, would, in his time as finance minister, hold three-person meetings to discuss monetary policy; the three were Takeshita, ex-MoF man Morinaga, who was the official Bank of Japan governor, and Tadashi Sasaki, the former

Bank of Japan chief.[26] Yet the real decisions were taken by Sasaki together with his princes, Maekawa and Mieno. From April 1975 to February 1978, the latter implemented them directly as head of the Banking Department, in charge of window guidance.

After Maekawa's ten years as governor, from 1974 to 1984, Mieno took the helm of the Bank of Japan. He ruled for the first five years, from December 1984 to December 1989, as deputy governor. After that, he continued his rule, but with the official title of governor. Meanwhile, Maekawa and Mieno had long been grooming the next heir to the throne: While Mieno was running the Bank of Japan as deputy governor, the new prince was earning his spurs as the administrator of the credit control mechanism, in charge of the Banking Department: From September 1986 to May 1989, longer than average, the head of the Banking Department was Toshihiko Fukui. As planned, when Mieno's ten-year term ended, Fukui duly took over the helm of the BoJ in December 1994, when he was appointed deputy governor.[27]

No Public Scrutiny for BoJ Men

The ease with which the BoJ men were appointed de facto heads of the Bank of Japan according to succession plans that had stretched over decades was telling. The decisions on the BoJ appointments were made so far in advance that no informed observer was ever left in the dark. Before Mieno was appointed deputy governor in 1984, there was no debate about who would get the job. It was clear to everybody that Mieno was the handpicked successor. Again, when he was appointed governor, there was also no debate, not even behind the scenes. The *Nikkei* wrote as early as October 1988 that upon completion of his term as governor in December 1989, Sumita was likely to be succeeded by Mieno.[28] A few months later, in January 1989, the *Nikkei* reported that "it seems now confirmed that Mieno will become the governor of the BoJ in December." In June, the *Nikkei* reported that it had become "official" that Mieno would succeed Sumita. MoF and BoJ sources had already confirmed, in June 1989, that "the system won't change," indicating that the BoJ deputy governor would become the next governor.[29] The unsettled question was the secondary issue of who would be his deputy.[30] Since it would be a MoF man, he had to suffer the indignity of a public debate. Similarly, before MoF man Matsushita was appointed official governor in December 1994, there was a long debate about who would be governor. But there was no debate about the apparently more important job of who was going to be deputy governor—the media and informed observers already knew it would be Fukui.

The Kwantung Army Rules

To most Bank of Japan staff, it was quite apparent that there was an elite within the elite at the central bank: The small group of insiders that determined

the credit controls would fiercely guard their power over window guidance and not allow anyone else to have a say. Not only did they handpick their successors, they also only allowed a select number of loyal followers to take the key position of head of the Banking Department. Since the Banking Department implemented the window guidance policies, it had become so powerful and so independent from the rest of the Bank of Japan that other Bank of Japan staff called it the "Kwantung Army."[31]

The comparison with the Kwantung Army may be apt. This unit of the Japanese army was stationed in Manchuria. It acted almost independently from military headquarters in Tokyo and managed to pursue an aggressive and largely unchecked policy of expanding the Japanese sphere of influence into China. The result was disastrous. Similarly, the window guidance loan quota was decided by a small group of people within the Bank of Japan, who acted independently and were not accountable for their actions. Even alert bankers were aware of this fact, but since their business future depended on good relations with the central bank, there was nothing they could do. Bank officer 2 testified: "Window guidance is decided by the Business Department head [*eigyōkyokuchō*], who is the strongest man at the Bank of Japan and usually would become governor at one stage. In the bubble period it was Fukui; twenty years ago it was Mieno."

The Man Who Created the Bubble

Window guidance was already tightening in 1988 and 1989, well before Mieno became official governor.[32] Yet Sumita, then governor, knew little about this policy reversal. He also knew next to nothing about the credit guidance that created the bubble.[33] Poor Sumita has been getting the blame for the bubble—and has indeed apologized in public for it—while the trueborn BoJ staff have had much better press as fighters against asset inflation and guardians of monetary virtue.

The best press was received by Mieno when he became governor in 1989. He was acting as innocent bystander to the policies of the bubble era, criticizing them and suggesting that he would implement different policies. An interview with the press in late December 1989 was characteristic. The journalist was well informed and brought up the sensitive issue of window guidance. Mieno responded: "Until now, the framework of us respecting the lending plans of the private sector has continued, and I don't think this basic framework will change. However, when [banks] put together the lending plans, [the Bank of Japan], I think, will ask in earnest penetrating questions during the hearings and, as the case may be, I think that there will be cases where we will tell them our thinking in detail. Especially concerning the land price rises, we must increase our attention a step further. Of course, there are

many complicated reasons why land prices have risen so much, such as the legal system, the tax system, and so on, but funding has also had something to do with it. Therefore, it is a problem if banks that also have a public goods character lend for speculation purposes or continue to push loans and thus damage the soundness of the financial system. Until now we have asked the banks for self-control, but with this interest rate rise I would like banks to consider self-control a little more."[34]

Mieno could hardly have been talking straight. When Sumita was governor from 1984 to 1989, the crucial decisions about the credit controls were made by the deputy governor. The person responsible for setting the high loan quotas in the 1980s and thus responsible for the creation of the bubble was none other than Yasushi Mieno himself. Many observers had already acknowledged that at the time. The *Nikkei Financial Daily* reported, for instance, that during Sumita's governorship, Mieno "has turned out to play an important role as advisor to Sumita about the determination of monetary policy."[35] Mieno, who was making the real decisions, was sometimes called Sumita's "wife," in allusion to the Japanese tradition of reigning husbands but ruling wives.[36] The *Nikkei Financial Daily* wrote in 1987 that Mieno "is the one who, as BoJ trueborn, is doing the work in the team with the MoF old boy Sumita."[37] He was seen as the monetary policy "pivot" (*nemawashi yaku*) under Sumita.[38]

This is indeed why many experienced investors and Bank of Japan watchers, aware of Mieno's role before 1989, had been convinced in December 1989 that the newly appointed Governor Mieno could not possibly introduce any sharp policy changes; these experts knew that, after all, it was he who had been making policy all along under Sumita. The general manager of the investment department of a major Japanese life insurance company—whose interpretation of the implications of the new appointment was not an academic issue, but would directly affect fund performance—made the following assessment upon Mieno's appointment: "When reflecting on the fact that Mieno has been managing monetary policy until now as the powerful deputy of Sumita, there is absolutely no need to think that in the new [Mieno] system the policy will change."[39]

It must have come as a surprise to the market watchers that Mieno performed a dramatic U-turn and quickly distanced himself from his past policies by pretending not to have anything to do with them. Mieno played his role well. He had also created an alibi for himself early on. Already in 1986, when the bubble was started by Mieno's window guidance, Deputy Governor Mieno testified to the Diet that he was worried about the problem of excess money in the economy (*kane amari*).[40] If he was truly worried, why then did he set such high window guidance loan growth quotas for the banks? He stated in July 1987 in the Diet Budget committee, "The loose monetary policy will continue as until now."[41]

In his speeches as official governor, when he had already ended the speculative excess, Mieno placed the blame for the bubble on the private sector, real estate speculators and banks.[42] But the real estate speculators were lured by banks with irresistible offers of virtually free money. And the banks were forced by Mieno's window guidance to expand their lending to the real estate sector aggressively.

Mieno was not the only perpetrator; the credit controls were implemented by the head of the Banking Department. From September 1986 to May 1989, for three long and vital years, this was none other than Toshihiko Fukui, the next-generation prince of the Bank of Japan. As had been decided decades earlier, he was duly appointed deputy governor in December 1994. Although Fukui had to resign together with governor Matsushita in early 1998, he had since been vying to take over from interim Governor Hayami to resume his rule. Until 2002, the media, including the foreign press, touted him as the likely successor, "in line for the top job."[43] Hayami refused to resign early. However, there is no indication that the Bank of Japan's internal system of choosing princes has changed.[44]

We have identified the individuals who created Japan's bubble economy and are responsible for the longest postwar recession and the highest unemployment recorded since the 1930s. It is a small group of people within the Bank of Japan, whose actions were not checked or controlled by other Bank of Japan staff—the Princes of the Yen. They have been in control of Japan's economy. Their names are Yasushi Mieno, Toshihiko Fukui, and, in the early phases of the bubble creation, their mentor Haruo Maekawa. Mieno and Fukui, as deputy governor and head of the banking department, respectively, created the bubble economy from 1986 to 1989. After this, the same two people were in charge of monetary policy as governor (1989–94) and deputy governor (1994–98), overseeing the creation and prolongation of the recession of the 1990s. We have answered some questions, but new ones are raised: Mieno and Fukui were highly trained and experienced elite staff. Why on earth did they do what they did?

14 The Goal of Monetary Policy

We are faced with the twofold puzzle of why the Bank of Japan forced banks to create the bubble through excessive lending and why suitable policies to create a recovery during the 1990s were not pursued while government attempts at stimulating the economy were disabled. Change in personnel, such as the publicized change of governors in 1989 or 1994, cannot explain this. We found that the same two people were in charge in both the second half of the 1980s and most of the 1990s, namely, Mieno and Fukui. Why did they implement such policies?

It seems most appropriate to proceed by employing the well-tested methods of the judiciary. The first issue is to establish culpability. It would be possible to argue that Mieno, Fukui, and their close collaborators acted irrationally or suffered from temporary insanity. In economics, relying on this option as the primary explanation is frowned upon. If everyone acted irrationally and unpredictably, economic analysis would become meaningless. Instead, many economists, skeptical of people's verbal statements, prefer to look at their actions, arguing that an analysis of people's actual behavior reveals their intentions—the principle of "revealed preference." But even if one were to favor the irrationality or insanity explanation, its biggest problem is that so far there has not been any evidence in its support. To the contrary, we will encounter evidence that the actions and statements of the lead actors were remarkably consistent and logically coherent.

Failing evidence for insanity, Mieno, Fukui, and colleagues must be considered culpable. The next issue is whether the charge against them is one of recklessness or intent. It may be tempting to argue that the princes were simply incompetent, and hence they were merely reckless. However, we found that the princes are the unrivaled experts in controlling credit creation and using this tool to manipulate the economy.

The knowledge gained through the extremely detailed window guidance procedure meant that the head of the Business Department during the time

of the creation of the bubble, Fukui, knew exactly how much money was used for speculative real estate transactions. He could actually identify every large-scale borrower if he wished to. His boss and mentor, Deputy Mieno, the true governor of the Bank of Japan, had firsthand knowledge from the 1960s and 1970s about how increased loans to the real estate sector would create a bubble. Statements by both Fukui and Mieno in the 1980s show that they were well aware of what was going on: both commented how bank loans and expanded money supply were pushing up real estate prices. Since there was no firm rule, no disclosure of their reasoning, no pressure from MoF, and no accountability to anyone concerning the size of the window guidance loan quotas, Fukui and Mieno could do what they judged right. If they had really disagreed with the aggressively loose monetary policy pursued by MoF, the BoJ princes could easily have kept window guidance quotas smaller, for instance at 6 or 7 percent growth, half as high as the 12 to 15 percent rates Fukui implemented. But they chose such high loan growth quotas that a bubble was inevitable.

Concerning the 1990s, the conclusion is similar: Neither MoF nor the politicians had the technical knowledge to realize (at least until about 1998) that increased credit creation was the key to a recovery in the 1990s. But we saw that the BoJ princes knew very well. From the early postwar days, the princes had shown great expertise in ending credit crunch recessions. The bad debt problem was much worse in 1945, when Governor Ichimada printed money, bought corporate bills and commercial paper, refinanced the banking system, and boosted credit creation.

The Question of Motive

If knowledge and awareness of the actions and their outcomes exist, then the suspects acted with intent. The burden is on their defense team to prove that the outcome was not intended. Most of all, the prosecution has a strong case for intent if a motive can be established. If there were an explanation for their actions that is based on consistent and rational intent, premeditated action would be a plausible explanation. This seems a big hurdle at first—their policies of the 1980s and 1990s can be considered consistent only if their goal had been to wreak havoc with the economy. This does not seem rational at first. Why would anyone want to do that?

Did Mieno and Fukui make investments such that they would benefit from the bubble in the 1980s and later from the slump in the 1990s? Possible ... but unlikely. One method used by detectives to identify the perpetrator and a motive is to see who benefits from a crime. Thus we could also identify the major changes that the bubble and the recession have triggered and see who benefited. There is no doubt that the Bank of Japan has emerged as the main win-

ner among the major power players from the recession of the 1990s. While other bureaucracies were pared down, weakened, or even abolished, the BoJ finally achieved its goal of legal independence. While MoF lost key control levers, was broken up, and eventually lost its historical status as Ōkurashō, the powers and status of the Bank of Japan were dramatically enhanced. Thanks to the recession of the 1990s, the Bank of Japan won its long-standing battle with MoF, which began in the 1950s. Is this motive enough? Maybe. We have seen that the central bank had a strong desire to break free from the legal yoke of the ministry, as enshrined in the old Bank of Japan Law. It would not be the first time that an institution's policy was misused to further the sectarian interests of that institution. However, the evidence would be only circumstantial.

Call the Defendants into the Witness Box

Another, more direct way to determine the motives of the princes is to identify their stated goals and then identify the heartfelt convictions on which these goals are based. The best sources for this information are their own utterances and their own writings. In other words, it is time to call the defendants to the witness stand.

Much material is available, since senior executives of the Bank of Japan have given interviews, delivered speeches, and published reports. What did they have to say? Of course we can't expect dramatic revelations from published speeches or interviews. Central bankers are notorious for their extremely subtle statements and carefully worded remarks. However, the purpose of questioning witnesses is to probe for inconsistencies or contradictions—within someone's statement, or between that of several witnesses. Through such cross-examination, the truth can often be established with ease.

Throughout the 1990s, the Bank of Japan's spokesmen exerted considerable efforts to fend off any suggestion that the central bank could do anything beyond lowering interest rates to stimulate the economy.[1] Their reasoning usually followed this pattern: A set of often legalistic or technical arguments is proposed by Bank of Japan officials. As soon as the flaws and contradictions of one argument were pointed out in public, the spokesmen reacted not by correcting their mistakes and their policy, but by correcting their line of argument and simply deploying an entirely different, usually unrelated argument that happens to come to the same conclusion. This environment of ever-shifting explanations and counterarguments by the central bank has entangled it in contradictions, which are happily ignored by the next spokesperson. While the arguments frequently change, the conclusion has always followed a common script, no matter which spokesperson happened to express his frank "personal opinion": The central bank has throughout the 1990s done all it

could (interest rate reductions were enough; there was no way the central bank could have increased the quantity of credit and thus stimulated the economy).

The central bank performed a sudden policy U-turn on March 19, 2001, now officially pursuing what it calls a policy of "quantitative easing" despite the fact that it had claimed for a decade that such a policy was impossible to implement. Nevertheless, the Bank of Japan spokesmen continue to warm up the old reasons why this new policy (though officially adopted) could not possibly work. These unwavering efforts to block any reasonable argument why greater monetary stimulation should be taken by the central bank has led many observers to the conclusion that the central bank's statements are insincere excuses to implement its predetermined policy.

A distinguished U.S. economist who has followed the Bank of Japan's policies for years finally complained that "in recent years BoJ officials have—to a far greater degree than is justified—hidden behind minor institutional or technical difficulties in order to avoid taking action."[2] Meanwhile, despite numerous symposia, conferences, and fellowships for overseas professors—not to mention sharp calls from leading politicians and critics to ease quantitatively—the central bank has ignored the advice, which since around 1998 had become commonplace, to increase the money supply.[3] Many academics whose advice has been ignored may have been reminded of the words of Milton Friedman, long-standing consultant to central banks, when he spoke about the Federal Reserve: "I attended many such meetings of so-called academic consultants.... However, I finally concluded that the meetings were called purely for window-dressing purposes. I was unable to detect any influence whatsoever exerted by the consultants' comments on the system's actions. Indeed, the choice of the particular consultants invited to attend seemed designed to guarantee offsetting and contradictory advice, leaving the Fed free to pursue its own devices. However, even on those rare occasions when something approaching a consensus emerged, I could detect no subsequent effect on policy."[4]

At the same time it is apparent that key Bank of Japan staff had very early on—years before most economists—been highly familiar with the problems and possible solutions.[5] In 1992, an insightful journalist asked a key Bank of Japan official the question whether the central bank should not complement its interest rate reductions with quantitative easing or expansions in the money supply. The official responded, "It used to be our commonsense approach to watch both the interest rate side and the quantity side, and then take decisions, while quite widely employing methods of imposing limits, such as window guidance. Now the liberalization has moved forward and also the Bank of Japan has abolished window guidance. Now, to decide whether easing is sufficient or not, it is enough to see whether interest rates have fallen enough

or not. Completely unrelated to that, I think that in the future the question will become important whether in a situation where financial institutions hold nonperforming assets, bank behavior will start to change completely, compared with the past; in other words, whether the behavior of banks will differ from the past, when the Bank of Japan implements the same interest rate reductions as monetary policy, and whether the transmission mechanism of monetary policy is changing or not."[6]

The interview was with Toshihiko Fukui, at the time executive director of the Bank of Japan, who betrayed his familiarity with window guidance credit controls as well as the problem—at the time not yet visible—that bank credit would fall significantly, "changing bank behavior completely" and leading to what Bank of Japan officials later would describe as a "breakdown in the monetary transmission mechanism." His insights were surprising—some economists took almost another decade to come to such conclusions. What is more, Fukui, who would from 1994 to 1998 control the central bank's policies, even told us what he was going to do about these problems: nothing, since for some unspecified reason, unlike the previous fifty years, "to decide whether easing is sufficient or not, it is enough to see whether interest rates have fallen enough or not." This is just what Fukui did when he became deputy governor in 1994 and thus, with a Ministry of Finance bureaucrat as the official governor, de facto head of the Bank of Japan.

The Goal of Monetary Policy: Sustainable Growth

After years of denials by spokesmen that the Bank of Japan was able to inject more money, or that such a policy would have any impact on the economy, senior deputy governor Yutaka Yamaguchi recently admitted: "By and large, it might be true that, if a central bank continues purchasing all kinds of assets, almost by definition, inflation can be created in the end."[7] In other words, he agrees that the central bank can reduce deflation by purchasing more assets, such as bonds (and paying through credit creation). Yamaguchi also admitted in the same speech that inflation could not happen before the economy had recovered: "It is not correct to assume that inflation comes first, followed by an economic upturn or an increase in the growth rate. What happened in the past was the opposite: an economic upturn and a rise in growth rate came first and inflation followed with a lag."[8] Precisely. So the question remains: Why is the Bank of Japan not creating more money by buying more assets, thus stimulating demand, creating a recovery, and reducing deflation—following the correct chain of causation that deputy governor Yamaguchi acknowledges? Yamaguchi tells us, "Our goal is not to cause inflation, but to realize sustainable growth."[9] Given the causation Yamaguchi acknowledges (namely, that inflation could not happen before the economy was stimulated and a recovery

occurred), his statement comes close to saying that the central bank does not aim at reducing deflation or stimulating the economy in the short term. Instead, it aims to "realize sustainable growth." Let us consider other witnesses.

"Sustainable growth" is not a new phrase. To the contrary, similar to Cato the Elder's custom of ending every single speech with the same phrase, the majority of speeches by Bank of Japan spokesmen over the past decade contain the mysterious phrase that the "goal of central bank policy" is to achieve "sustainable growth."[10] To mention just a few recent examples: "In order to form a basis for stable and sustainable growth of Japan's economy, the Bank of Japan is determined to continue making every effort as a central bank";[11] "the Bank ... share[s] the same goal of ... bringing the economy back to a sustainable growth path";[12] "adjust monetary easing accordingly, in order to realize sustainable growth."[13] Even the Bank of Japan's Policy Board repeatedly makes statements to the effect that its monetary policy aims at "restoring Japan's economy on a sustainable growth path."[14]

Long Live the Long-Run

The key to understanding the goal of the Bank of Japan's monetary policy is therefore the correct interpretation of what BoJ leaders mean by "sustainable growth" and what kind of measures they think are necessary to achieve it. It is tempting to interpret the phrase to mean that the central bank wishes to stimulate the economy and engage in cyclical demand management. However, quite strikingly, in its many public statements the central bank has never clearly stated that it aims to stimulate the economy in the near term, nor has it taken steps to implement such policies in a consistent fashion. Quite the opposite.

The central bankers make a clear distinction between the short-term and the long-term. In a speech in 1994, governor Mieno spoke much about "sustainable economic growth" being the objective of his policies, and clearly defined it as being a "medium- to long-term" goal.[15] Other central bankers have repeated these words. Governor Hayami, for instance, often speaks of "*long-term* sustainable growth" as the goal of the central bank's policies.[16]

What does the achievement of their long-term goal mean for the economy in the short term? Bank of Japan spokesmen have told us unambiguously and repeatedly over the past decade that quite contrary to any near-term stimulation of the economy, their goal of "sustainable growth in the long term" may require a short-term *deterioration* of the economy. As early as 1993, Governor Mieno indicated, "As we pass through the current adjustment phase, the most important goal we have adopted for guiding policy management is *not the attainment of short-term improvements in economic conditions, but the long-term objective of achieving non-inflationary sustainable growth*" (italics added).[17]

A year later, Mieno warned, "In conducting monetary policy, whilst fully recognizing the pain of those who are adversely affected, we have to focus on the stabilization of economic activity as a whole from the medium- to long-term perspective."[18] Mieno ends this speech with the obligatory "I should like to conclude by saying that the Bank of Japan will continue to do all it can to put the Japanese economy on the right track for a non-inflationary sustainable growth in the medium- to long-term."[19]

Given a choice between a policy to achieve a recovery in the short term and one that would create a recession in the short term, but may offer "sustainable growth" in the long-run, the Bank of Japan has repeatedly stated that it would prefer the latter. By Mieno's measure, the central bank's policy over the 1990s therefore has not been a failure. Inflation has not been a problem during the 1990s. And the short-term pain has also been visible. The positive fruits of monetary policy, on the other hand, can only be reached after some indefinite period in the long-term future.

It was of course precisely such policies and arguments that British economist John Maynard Keynes criticized during the 1920s and 1930s, immortalized by his often-cited reminder that "this *long run* is a misleading guide to current affairs. *In the long run* we are all dead."[20]

The Definition of "Sustainable Growth": Structural Transformation

What, then, is the Bank of Japan's definition of this promising state in the future when "sustainable growth" can be achieved? Indeed, when can Japan expect to reach it? First, let us consider the obstacles to sustainable growth. Governor Hayami told us that a "basic structural factor ... behind Japan's lost decade of the 1990s ... is that a variety of systems which had supported the postwar development of Japan's economy became unsustainable."[21] In the Bank of Japan's view, then, a basic obstacle to achieving sustainable growth appears to be Japan's postwar economic system. Other BoJ speakers have said it more bluntly. Shirakawa, whose title at the Bank of Japan is adviser to the governor, told us in 2001 that the "prerequisite" for sustainable growth is "structural reform."[22]

Back in 1993, Governor Mieno was talking not only about structural reform, but about the need for an even more far-reaching "*structural transformation*": "In my description of how I would like the economy to look, you can see that there is a very close resemblance to the economy Japan was aiming at following the Plaza Agreement and during the subsequent period of the rapid appreciation of the yen. With hindsight, I feel that the structural transformation that Japan committed itself to at that time gradually receded into the background during the recent economic boom and the bubble phenomenon. Now, once again, Japan is becoming conscious of the need to implement such

transformation.... I do wish to reiterate that it is very important that these medium- to long-term objectives [to implement a structural transformation] be kept in mind when managing the nation's monetary policy."[23]

BoJ Policy Board member Kazuo Ueda has explained that this structural transformation or reform "may produce deflationary forces in the short run, but will generate a much more efficient economy after a while."[24] The Bank of Japan's Policy Board has even declared that "structural reform may be accompanied by painful adjustments. Without such adjustments, however, neither improvement in productivity nor sustainable economic growth can be obtained."[25] Governor Hayami explains that in the short-term a recession must be accepted, as the long-run goal of structural reform takes precedence: Many people, Governor Hayami admitted, feel that "bringing the economy back to the recovery phase of the business cycle is an important challenge."[26] But, as with Mieno before him, he does *not* place priority on this goal, he explains in the same speech: "Furthermore, *it is more important* that Japan goes beyond this by regaining economic dynamism by steadily pursuing structural reform" (italics added).

To summarize what we have learned from the record of official statements by Bank of Japan leaders about the goal of monetary policy: it is not aimed at achieving a recovery in the near term. Instead, it is aimed at long-term "sustainable growth." That, in turn, can only be achieved after structural change, even a structural transformation, has taken place.

How Can Monetary Policy Achieve Structural Change?

All this may appear puzzling at first. The central bank is in charge of monetary policy. On the one hand, the declared goal of its monetary policy is to achieve sustainable growth. On the other hand, it says that the prerequisite for this sustainable growth is structural reform. We know, however, that the Bank of Japan has no mandate and also no regulatory power to directly implement structural reform. So the obvious next question is: how can the central bank possibly implement the declared goal of its monetary policy, namely, to achieve sustainable growth through structural reform?

How can structural reform, a change of the "systems that had supported the postwar development of Japan's economy," be achieved by the Bank of Japan?[27] We know it can only use monetary policy to achieve its aims. But would it use monetary policy to implement structural reform? And if so, what type of monetary policy could it possibly take that would achieve its aim and result in a structural transformation of the economy?

Finally, is this not a political agenda, out of bounds and out of the hands of the central bank? The Bank of Japan does not think so. Shirakawa, adviser to the governor, explains, "It is not easy to change the institutional framework

and promote structural reform since it necessarily involves the vested interests of all the related individual economic agents."[28] This is where the Bank of Japan feels it has a role to play; it realizes what critics have pointed out, namely, that structural reforms will not stimulate demand.[29] Policy Board member Ueda agrees that "such efforts may produce deflationary forces in the short run." The aim is in the long run, when structural reforms "will generate a much more efficient economy after a while."[30]

So how can *current* monetary policy be helpful in achieving the *long-term* goal? The central bankers already told us the surprising answer to this riddle: It can be helpful by not being helpful. The Bank of Japan's Shirakawa explains that "further easing [of monetary policy] would not contribute to economic recovery, but would rather delay the progress of structural reform that is a prerequisite for sustainable economic growth."[31] The BoJ's Okina explains, concerning stimulatory short-term policies: "Couldn't the current low interest rate policy cause some harm? The answer is yes.... Low interest rates as a pain reliever may induce a further delay in the progress of structural adjustment. When the economy recovers, nonperforming loans could become collectable, excess inventories could be sold, and excess equipment could become operational."[32] According to him, such a state of affairs—normally called a recovery—is to be avoided. This is why Deputy Governor Yamaguchi can say about the link between central bank policy and structural change that "monetary policies cannot replace structural policies" and that the Bank of Japan had faced the "big dilemma" that monetary easing would produce a "mitigation of immediate risks," which in turn would result in a "delaying of adopting ultimate solutions."[33] This is why former deputy governor Fukui can say, "Considering the gap in supply and demand conditions in the economy, *it's easy to think of a policy of decisive monetary easing.... But we must be wary of the risks associated with further easing*, such as by purchasing more Japanese government bonds or setting inflation targets." What are the risks? "It's dubious to think that monetary policy alone could lead to *a sustainable recovery*.... As the financial markets tell us, what is also important are Prime Minister Koizumi's *structural reforms*" (italics added).[34] The risk that the BoJ has in mind is a delay or even an end to structural reforms, which it has defined as being a necessary condition for its goal of "sustainable growth."

It cannot be considered a secret. The media have been frequently reporting that "Hayami is convinced that Japan needs to undergo radical corporate restructuring and banking reforms before it can recover—and that he has a duty to promote this.... Mr. Hayami's passion for reform also has a flavor of austerity. On paper, most economists—and politicians—think it would be sensible to offset the pain of restructuring with ultra-loose monetary policy. But Mr. Hayami fears that if he loosens policy too quickly, it would remove the pressure for reform."[35]

In other words, it must be concluded that the central bank is aware that serious monetary stimulation *would* create a recovery, but it has chosen for a decade to avoid this because it would delay its structural reform agenda.[36] Adam Posen, an economist at the Institute for International Economics in Washington, D.C., agrees with this conclusion: "Between a process of elimination, and careful reading of the statements of BoJ policy board members, I am led to the conclusion that a desire by the BoJ to promote structural change in the Japanese economy is a primary motivation for the Bank's passive-aggressive acceptance of deflation."[37]

This explains why the central bank has consistently and puzzlingly opposed what appears to be a sensible idea to other supporters of structural reform: "If this structural policy has a depressive or a stimulatory effect on the economy, it must be accompanied by the appropriate macroeconomic policy to offset this effect."[38] To this type of argument, Governor Hayami countered in May 2000: "When the economy recovers, as is now happening, it might well be the case that efforts for structural reform might be neglected due to a sense of security."[39] That was his justification for tightening monetary policy again in 2000. Indeed, only when one has fully understood the Bank of Japan's definition of sustainable growth—namely, the implementation of a far-reaching structural reform agenda—does it become obvious why most of the central bank speeches and statements have denied the need for further monetary stimulation in the short run: Such stimulation is deemed inimical to achieving *sustainable* growth precisely because it would create *short-term* growth—and hence reduce the pain and pressure necessary to gather enough political support for the structural reform goal.

The Goal of Monetary Policy in the 1980s

The public statements by central bankers have provided the answers. We have found the reason for the Bank of Japan's actions in the 1990s. It never aimed at stimulating the economy. It intentionally took recessionary policies, because it pursued a political agenda that required it to engineer a recession. That agenda is nothing less than to change Japan's institutional arrangements and transform the economy.

But what about the 1980s, when the princes forced banks to create the bubble? How do the defendants explain this when called to the witness stand? When Toshihiko Fukui was head of the Banking Department, he was interviewed by the Japanese-language *Nikkei Financial Daily* in July 1987, just after he had kicked off the bubble. The journalist asked the right man the right question. He asked Fukui, "Borrowing is expanding fast.... Don't you have any intention of closing the tap on bank loans?" Fukui answered, "Because the consistent policy of monetary easing continues, quantity control of bank loans

would imply a self-contradiction. Therefore we do not intend to implement quantity tightening. With structural adjustment of the economy going on for quite a long period, the international imbalances are being addressed. The monetary policy supports this; thus we have the responsibility to continue with the monetary easing policy for as long as possible. Therefore it is natural for bank loans to expand."[40]

On first reading, this may appear to be a convoluted and somewhat confusing answer. However, upon closer inspection it becomes quickly intelligible.[41] Fukui justified the setting of the excessively large loan quotas—and thus the creation of the bubble—by the necessity for "structural adjustment," which had to continue "for quite a long period." According to him, already in the mid- and late 1980s, the goal of the Bank of Japan's monetary policy was to "address ... the international imbalances" through this "structural adjustment." Again, initially, there seems to be a puzzle: If the goal of monetary policy in the 1980s, just as in the 1990s, is to engineer a structural transformation, just what *current monetary* policies could the Bank of Japan possibly take in order to support this goal? Fukui explains that the right monetary policy to implement the structural transformation of Japan's economy during the 1980s was to "continue with the monetary easing policy for as long as possible. Therefore it is natural for bank loans to expand."

Fukui's mentor and associate, Yasushi Mieno, seemed equally aware of the implications of their window guidance quotas. In a speech in 1993, the then-governor admitted that he knew that a bubble must always lead to recession. Talking about the bubble, he said, "Once a wave of this proportion had come into being, it was inevitable that it would be followed by a major adjustment."[42] That, according to Mieno, had a positive effect. As we have heard, Mieno, like Fukui, was a declared supporter of a transformation of Japan's economic system.

To transform Japan was no small undertaking. As we saw in the initial chapters, the war economy system was internally consistent and permeated all sectors and levels of the economy and even society. It had shaped the labor market, the capital market, the corporate governance structure, the legal system and the behavior of firms, bureaucrats, and politicians, as well as ordinary people. To change Japan, it seemed, one needed to change everything. Only if one abandoned all features of the old system would it be possible to create a different economic structure. How could such a historically unprecedented undertaking be completed? Mieno told us that it was the recession that made everyone in Japan "conscious of the need to implement such transformation."

The Recession Is Good—for Reform

Deputy Governor Yamaguchi also revealed his insights into the historic origin of Japan's system and the feasibility of deep changes if the system was put

under pressure: "I should point out that systems and practices are not set in stone, so to speak. They would *change*, however gradually, *under pressures from the changing environment*. For example, according to economic historians, lifetime employment, which is now closely associated with major Japanese corporations, was not widely adopted until the 1920s. I believe, therefore, that constraints on economic growth from existing systems and practices are temporary, until the economy adapts to the new environment.... What is important is to keep our heads up and carry on with the necessary structural reforms" (italics added).[43] This seems to explain Yamaguchi's view that monetary easing would produce a "mitigation of immediate risks," which in turn would result in a "delaying of adopting ultimate solutions."[44]

Sasaki Calls for Transformation of Japan

We have established the structural reform agenda as the consistent leitmotiv of the central bank's policies in the 1990s. We also found it present already during the 1980s. The next question we now need to ask is where this structural reform agenda comes from, on what type of theory it is based, and how long it has been pursued. In probing these issues, we may be able to make further progress in finding answers to the question why the princes expanded the window guidance bank loan quotas so dramatically during the 1980s and thereby forced the creation of the bubble.

Since the princes are known to have worked together closely, it would be illuminating to check whether Fukui and Mieno's predecessors, who handpicked them, also shared their goals. In doing so, it is hoped that we can shed further light on the events of the 1980s. We therefore go back to the man who hired young Mieno and anointed him prince—Tadashi Sasaki. Sasaki himself was the first prince picked by "Pope" Ichimada, who made him head of the Banking Department and let him implement his tightly operated credit allocation mechanism. As planned, Sasaki soon succeeded Ichimada to control the economy for over ten years. Like Ichimada, a hands-on *dirigiste* and interventionist, he made ample use of his far-reaching powers by deciding on the allocation of funds in the economy, quite similar to the wartime days when Araki and Ichimada controlled and allocated credit according to the guidelines drawn up by the wartime planners.

Despite these first-rate credentials as planner and controller, in the early 1980s a mysterious transformation seems to have occurred: Sasaki appeared to have converted to a different creed altogether. All of a sudden he had become an outspoken supporter of the goal of financial liberalization and internationalization of Japan's economy. Apparently he had become convinced that Japan's economic system needed to be fundamentally changed. Having handed the BoJ baton on to Prince Maekawa, Sasaki had become head of the

Keizai Dōyūkai (Japan Association of Corporate Executives), and as such, in January 1983 he called for a five-year plan for transforming and liberalizing the Japanese economy, entitled "Toward Consciousness and Behavior of a World Nation."[45]

This plan called on Japan to help the world by speedily opening its markets, arguing that the economy "must be changed from one looking after national interest to one looking after common world interest." It targeted the agriculture, finance, and service sectors for fast, "complete" liberalization. It aggressively demands administrative reform, a greater role for politicians in policy making, an end to regulations and bureaucratic guidance, and a significant strengthening of the role of the prime minister, giving him the power to exert strong leadership. These changes, the plan said, would benefit Japan and the world: "Such a bold market opening would not only help in solving the economic friction with Europe and the United States, but if the economic structure changes, this would also lead to a continued vitality of the Japanese economy." Thanks to these revolutionary changes, Japan's economic growth rate would remain high, rendering 5 percent real growth possible.[46]

The report was mainly aimed at a domestic audience. Although formulated in polite and understated language, it was radical for its time, as it called for a fundamental transformation of Japan, including a change in the political process and an end to the power of the bureaucracy. Although veiled, it represented a frontal attack on the elite of the postwar system, especially the Ministry of Finance.

Sasaki followed up his demands with another report issued by the Keizai Dōyūkai a year later. Now he demanded, in the name of internationalization and portfolio diversification, that Japanese banks should expand their business activities aggressively abroad. In order to make this possible, the Ministry of Finance should loosen the regulation of banks' foreign business (until then kept tightly in check) and allow trust bank and stock brokerage subsidiaries abroad.[47] His recommendations were implemented. They provided the institutional setting within which the window guidance successfully created the bubble and the surge in Japanese capital outflows of the 1980s. It is telling, of course, that deregulation convert Sasaki did not demand changes in the way the Bank of Japan was tightly controlling the banking system and running the economy via window guidance. To the contrary, he even hinted that he supported it, and in 1983, when window guidance was officially not relevant for monetary policy anymore, Sasaki gave evidence that window guidance still existed. In an interview about a published report on the need for financial liberalization in April 1983, an insightful journalist asked him: "In an era of financial liberalization, how should monetary policy management be conducted?" His answer: "It is necessary for changes in the ODR to be done flexibly, elastically. This is what the BoJ has really been aiming at, thus it

can also be said that the report affirms the current ODR policy. About the BoJ window guidance of private financial institutions, the opinion that this should be changed is not especially mentioned."[48]

Maekawa's Private Meetings

In the end, monetary policy was indeed highly "flexible" during the 1980s and 1990s. While Sasaki was too old to see through the implementation of his ideas and what then was called a five-year plan, he could trust his successor, Haruo Maekawa, to fight the battle for him. Maekawa's internationalist credentials were earned early on, when he became the BoJ section chief in charge of foreign exchange (where it was part of his job to cooperate with the U.S. Federal Reserve System).[49] Later on, he was sent to head the BoJ New York office for two years, from 1958 to 1960. Back at Tokyo headquarters in Nihonbashi, Maekawa then was made head of the foreign exchange bureau, where he continued to coordinate Bank of Japan operations with the New York Fed. Before commencing his ten-year rule, first as deputy governor, then as governor, Maekawa had been a regular representative of the Bank of Japan at meetings of the IMF and the BIS (Bank for International Settlements) as board director.

In his public pronouncements, Maekawa followed in the newly formulated footsteps of his mentor Sasaki. He also seemed an ardent proponent of liberalization and internationalization of the financial sector—though once again his zeal for deregulation did not include the abolition of central bank window guidance, which continued throughout the 1980s. As governor of the Bank of Japan, he criticized the Ministry of Finance's policies that protected the financial sector from foreign competition: "It is not good to help every single financial institution like a ship in a convoy formation." Just like the U.S. negotiators, he demanded liberalization of interest rates for large short-term deposits as a first step toward full-blown financial liberalization.[50]

Yet Maekawa had to tread carefully. As central bank governor he could not be seen to be pushing for changes of Japan's economic system too openly. Politicians and the bureaucrats, especially at the Ministry of Finance, would have objected and pointed out that such issues are not the concern of the central bank. MoF would probably have argued that these are policy considerations that need to be decided through the institutions of a democracy.

During his time as deputy governor, Maekawa confided in the small group of "Kwantung Army" members, the hand-picked princes and insiders who ran Japan's economy through the window guidance credit controls. They met every evening on the eighth floor, the executive floor, of the new building of the BoJ headquarters, for exclusive *marutaku* roundtable deliberations. Access was limited and the content of their discussions remained private. Although

legally, Maekawa had to report to Governor Morinaga, the "old boy" from the Ministry of Finance, he did not bother to invite him to the daily deliberations. The *Nikkei* once reported that Morinaga "forgave" such exclusive meetings—presumably since he thought he was in control of the economy via his influence over interest rates. Like many ministry bureaucrats, Morinaga seems to have been blissfully unaware of the crucial role of the clandestine window guidance controls.[51]

The Maekawa Report

After ten years in charge of monetary policy, Haruo "Mike" Maekawa handed over the control levers of the economy to Mieno in December 1984. As Sasaki had done before him, this enabled him to engage in lobbying and more open scheming in the pursuit of his goals.[52] The lobbying of Sasaki and Maekawa, as well as other like-minded internationalists, was not without impact. On October 31, 1985, Japan's prime minister, Yasuhiro Nakasone, formed the Study Group on Adjusting the Economic Structure for International Cooperation, officially translated into English as the Advisory Group on Economic Structural Adjustment for International Harmony. Nakasone appointed Maekawa to head the group with the brief to "conduct a study on policy measures, from medium- to long-term perspectives, concerning Japan's economic and social structure and management" and how it should change. Over the coming five months, the Advisory Group met nineteen times, and on April 7, 1986, it submitted its recommendations to the prime minister.[53] In the media, the report quickly became known by the name of the chairman who had shaped its content and conclusions—Maekawa. While the Maekawa report received far more media attention, it closely echoed the demands of the earlier Sasaki report. It was, however, more detailed in its recommendations and blunter in its language.

In the opening paragraphs it stated its conclusion: "*The time has thus come for Japan to make a historical transformation* in its traditional policies on economic management and the nation's lifestyle. There can be *no further development for Japan without this transformation*" (italics added).[54] The medium-term national policy goal propagated by the report was the "determination ... to attain the goal of steadily reducing the nation's current account imbalance." It was recognized that the "large current account surplus is basically linked with Japan's economic structure" and its export orientation. Therefore, "there is an *urgent need for Japan to implement drastic policies for structural adjustment and to seek to transform the Japanese economic structure* into one oriented toward international cooperation"(italics added).

The report read like a wish list by U.S. trade negotiators. It started with the call for administrative reform—basically the abolition of bureaucratic

powers by switching from regulation and the license system toward policies based upon market mechanisms and to "freedom in principle, restrictions only as exceptions." It aimed at import expansion, greater market access for foreigners, and a "thorough promotion of deregulation." Even concerning the politically sensitive agricultural sector, the report called for an opening up to imports and "greater use of market mechanisms."

Maekawa's report called for the "transformation from export-led economic growth to domestic, demand-driven growth by expansion of domestic demand." This was to be achieved through increased private consumption as well as a shift of low-value-added factories abroad. Consumption was to be stimulated by income tax cuts, more free time through reduced working hours, the five-day work-week, and a greater use of paid leave for longer periods. Consumption was also to be boosted by housing policies and urban redevelopment, based on tax incentives, relaxation of residential development guidelines, and easing of restrictions on building size and land use.

In order to "encourage imports of manufacturing goods" Japan should streamline its distribution mechanism and review the "various restrictions pertaining to distribution and sales." It also called for the government to deal harshly with unfair or exclusive trading practices, "promote the liberalization and internationalization of the nation's financial and capital markets," and internationalize the use of the yen.

Prince Mieno Recruited for Maekawa Report

In short, the goal was a "transformation" of the entire body politic, the abolition of the war economy system, and the introduction of a U.S.-style free market economy. In the words of the report: "It is imperative that *every effort* be made for attainment of this national goal, and the Group thus very much hopes that the Government will make every effort to implement these recommendations with the full understanding and support of the entire nation" (italics added).

Maekawa's advisory group recruited the ruling prince, Deputy Governor Mieno, as a member, while some of those members who uttered dissent, such as the highly respected economist Isamu Miyazaki, were relieved of duties.[55] In May 1987, a new, updated Maekawa report was announced. This report had been expanded from eleven pages to forty-one and basically reiterated the points of the first report but included a much more detailed set of concrete changes that Japan should undertake. Moreover, it included some estimates how the economy was expected to shift away from the agricultural and manufacturing sectors toward the knowledge and service industries. Intriguingly, it also set a timetable for the completion of its goals: The knowledge and service industries, for instance, were expected to account for 32 percent of GDP in the

year 2000—up from 25 percent in 1985. It also presented calculations on the number of jobs that would be created thanks to deregulation in the new sectors. A third version of the report was announced in June 1988. It was entitled "The New Economic Plan—The Japan that Lives Together with the World."

The explicit timetable of achieving set targets for a structural transformation of Japan by the year 2000 was further emphasized by the unofficial name of the Maekawa reports. Since their publication, the set of Maekawa reports had been known inside the Bank of Japan simply as the "ten-year plan."[56]

Using Monetary Policy for Structural Reform

The reports in the press and by commentators on the Maekawa report were highly critical: Observers recognized the radical nature of the plan. Thus it seemed far too ambitious. It was calling for a wholesale revolution of all parts of the Japanese economic, political, and social system. It seemed Utopian to think one could solve the deep-rooted and intractable problems of the structural trade surplus, high land prices, the closed agricultural sector, the low quality of life, long working hours, and too much regulation all at the same time. Not surprisingly, at the packed press conference where the Maekawa report was announced, disrespectful foreign journalists gave Haruo Maekawa a difficult time: "We've heard this so many times before," one German reporter said. "Why should we believe it now?"[57]

Although the plan was fairly clear about what was wanted, it was embarrassingly silent about how the proponents were going to go about achieving those lofty goals. The only statement it contained about how to reach these goals was this: "*In the implementation of these recommendations, fiscal and monetary policy has a significant part to play*" (italics added). This is an intriguing statement, because fiscal and monetary policy are largely cyclical policies, while the report was all about structural change, something that has to do with regulations, changes of laws, and practices—in other words, a political process aimed at changing the regulatory and hence institutional framework. True, fiscal policy can have significant structural features, so its mention can be justified. Indeed, the report called for fiscal reform, including abolition of preferential tax treatment for savings. What remains unexplained, however, is how the purely cyclical policy tool called monetary policy could be used to implement structural changes. The report merely says the following to clarify this mystery: "While ensuring currency stability, *flexible management of monetary policy is necessary* to realize an economy led by domestic demand" (italics added).

There it was again—the enigmatic demand by central bankers, such as Sasaki, to implement structural changes through "flexible" monetary policy. "Flexibility," according to the Oxford English Dictionary, means "easily

changed to suit new conditions." The time scale envisaged by the report was long, but with an immediate start: "Since the process of reforming the economic structure and improving the basic character of our economy is a long-term one, efforts to this end should be made *continuously and form a long-term perspective.* However, *relevant policy must be initiated as soon as possible*" (italics added).

The Round of the Twelfth

This raises two questions: Just what is the "relevant" form of "flexible" monetary policy that would further the structural transformation envisaged in the Maekawa report? Second, how could Maekawa hope to implement whatever this relevant flexible monetary policy was, considering he was out of power as governor? We begin by assessing the second issue—did Maekawa have any influence over monetary policy?

Maekawa may have formally been out of power. But he was no outsider. As *sempai* (senior) and mentor of the current de facto head of the Bank of Japan, Yasushi Mieno, he had direct access to the powerful extralegal window guidance credit controls. Maekawa held exclusive meetings with Bank of Japan staff on a frequent basis. Every twelfth of the month (with the exception of weekends and holidays), Maekawa gathered current Bank of Japan officials of the rank of board director and department head in the Hotel Okura in Tokyo. They could participate only if invited. Upon arrival, they were asked to report on their current activities and their policies at the Bank of Japan. Maekawa then gave them advice on what to do. It was an honor to be invited to this exclusive gathering with "Mike," called the "Round of the Twelfth." And since the loyalties of the princes go back decades, his precious advice was probably heeded by Mieno and his colleagues.[58]

Remote Control

There were other meetings. An even closer circle of Maekawa followers met on the first Monday of the month—the "Monday Club." The most frequent attendees were Mieno and Fukui—the latter by 1986 head of the Business Department and long anointed as the next prince and Mieno's successor. Every two months, Maekawa gathered a yet more select circle of followers to the *Hongoku kai*, named after the address of the Bank of Japan in Hongoku-cho, Nihonbashi. Of course Mieno was there, as were selected executive board directors, such as Kanno. It goes without saying that neither Satoshi Sumita, the reigning governor of the Bank of Japan, nor other Ministry of Finance executives were invited.[59]

This is strong evidence that Maekawa kept closely in touch with the affairs at the Bank of Japan. However, could he actually influence events at the

central bank, such as the secretive window guidance? There is evidence that Maekawa's influence even over minute details at the Bank of Japan remained significant. His power over his juniors and followers extended to personnel decisions, since it was Maekawa who basically decided into which companies the BoJ bureaucrats, once retired from the Bank of Japan, would parachute for their *amakudari* jobs—one of the most important, if not the most important personnel decision, since the pay structure at Japanese bureaucracies is such that payoff time arrives when a retirement job is taken. The following facts were provided by an investigative journalist of the *Nikkei Financial Daily*: Akira Oka, who had been Executive Director at the Bank of Japan, had just been made deputy governor of the Japan Development Bank. But Maekawa was looking to appoint a loyal follower to fill the post of president of the Tokyo Bay Road Company.[60] So he asked Oka to resign from his new post at the Japan Development Bank (JDB) to take this job. "Once you have reached a position like yours, you can't just decide about your life on your own," Maekawa had told Oka. "So, having been told this, I had no choice," reflected Oka later.[61] By having power to allocate the plum retirement jobs, Maekawa was in a strong position vis-à-vis his juniors at the central bank.

We don't know, of course, what exactly Maekawa had to discuss with the current elite of Bank of Japan executives. We do know, however, that he was keen to get them closely involved with his ten-year plan, for he took the official step of formally enlisting his chosen successor, Yasushi Mieno, into the advisory council for the second Maekawa report. Mieno was at the time officially deputy governor of the Bank of Japan and the ruling prince (needless to mention, the official Bank of Japan governor, MoF's Sumita, was not part of the Maekawa report advisory council).

Not only was Mieno the highest-ranking trueborn Bank of Japan official, but he, together with his chosen successor, Fukui, controlled the window guidance. We must therefore consider it as established that those who produced the Maekawa report and its timetable of transforming Japan by 2000 also had direct access to the most powerful economic policy tool, the window guidance credit controls.

Needed: A Crisis

Thus we move on to the first question. How could Maekawa and his confidants implement the Maekawa report and achieve its numerical targets by about 2000? And what was the role of the right type of ("flexible") monetary policy, which they had hinted at cryptically? We saw above that the head of the department that implemented window guidance credit controls, Toshihiko Fukui, had said in July 1987, soon after the publication of the second Maekawa report, that suitable central bank policy to implement the structural

transformation of Japan's economy was to "continue with the monetary easing policy" and, explicitly, for "bank loans to expand."

Another riddle. Why did the Bank of Japan leadership consider the excessive extension of speculative loans in the second half of the 1980s as the right monetary policy, in order to implement Maekawa's structural transformation of Japan's economy? Why did the very same leadership (of Fukui and Mieno) consider the recessionary credit policy of the 1990s as the right monetary policy to further the plan to transform Japan's economic structure? How can the disastrous monetary policy of first creating a bubble and then a massive recession be considered appropriate by Fukui and Mieno?

The reformers wanted to rid Japan of the war economy structure and transform its economic system, together with the structure of political decision making (by disenfranchising the ministerial bureaucracy that had previously been dominant in shaping the regulatory framework). As their talk of a "transformation" indicated, they were aware that this was nothing short of a revolution. Why are such revolutions never easy to implement? Because any system has groups that benefit from it and hence have no desire to change it. Maekawa and friends therefore would have to overcome all the economic and political vested interests of the old system. The politicians were happy with the way things had been—they received lush funding from big business and the Finance Ministry for pork barrel projects in their rural constituencies. Big business was doing fine—huge profits were accumulating from the successful export drive that had conquered world markets. And finally, the entire power base of the bureaucracy was built on its ability to conduct administrative guidance and grant licenses. The Ministry of Finance in particular, pinnacle of the bureaucratic elite, stood to lose heavily from the proposed financial deregulation program.

Given these odds, it is understandable that the media reacted negatively to the publication of the Maekawa report. Surely such a tall order was a nonstarter. More hot air from Tokyo, the foreign journalists thought. True, there were many influential leaders who shared the internationalist perspective—in politics, in business, and even among the bureaucracy. But they were clearly outnumbered. Even if some members of the elites could be won over by the rational arguments presented in the Maekawa report, the majority, especially those less interested in the benefit for foreign countries, could not be expected to agree to scrap Japan's economic system—the very system that had delivered the postwar economic miracle. The revolution was likely to fall on deaf ears.

Historians would not be surprised at such obstacles. It is one of the laws of history that there is only one set of circumstances under which countries ever change in a fundamental way; indeed, there is probably no country in the world that has changed its economic, social, and political system in a significant way without a crisis. Since any system breeds vested interests, change

tends to come about only when a crisis shakes up the entire nation and undermines the position of the established powers.

The Maekawa report was not detailed about the "significant part" that monetary policy would play in the implementation of its goals. How could Mieno, Fukui, and their followers inside the Bank of Japan "initiate the relevant monetary policy" immediately? We saw that the Bank of Japan is a believer in this law of history, since a Bank of Japan official said, "It is not easy to change the institutional framework and promote structural reform since it necessarily involves the vested interests of all the related individual economic agents."[62] Except if there is a crisis.

Is this where central bankers can be helpful? In 1993, when the recession had already started (triggered by window guidance), Mieno pointed out that thanks to this recession everyone was becoming "conscious of the need to implement such transformation," as the Maekawa report had envisaged. This is from the person who was responsible for the window guidance that created the bubble, and who indicated in 1993 that he knew very well that such a bubble must be followed by a significant downturn.

The Crisis That Window Guidance Could Create

If one wanted to implement the Maekawa report, had the necessary tools at hand to manipulate the economy, and had a Machiavellian bent, one might start thinking about how a crisis could be created.

By 2000, I was not the only observer who had concluded that "the BoJ wants to use monetary policy to induce structural reform."[63] If the Bank of Japan wanted to use the cyclical tool of monetary policy "flexibly," starting "immediately" in 1986, to achieve the long-run implementation of the structural transformation goals of the ten-year plan, as Bank of Japan spokesmen told us, logic leaves only one way to do this. Monetary policy would have to be used to promote a historic crisis, sufficiently large to overcome the vested interests (notably the Ministry of Finance).

Of course, such implementation would be impossible if monetary policy was transparent and worked through interest rates, but this was not the case. What type of window guidance would achieve the long-term goals best? There are only two options: one, to tighten window guidance drastically to create an immediate downturn; the other, to loosen it dramatically to create a financial bubble. One problem with the former option is that if one simply restricted window guidance without any good reason and thus created a recession, there was the danger that the cause of the recession would quickly become public knowledge (as actually happened with the tight window guidance of 1989). Opponents would complain about the excessive tightness of window guidance, and it would become difficult to tighten further. In the 1980s, the

Bank of Japan still had to consider the opinions of its political opponents and the Ministry of Finance, because legally it was completely subordinated to the latter. The second problem would be that a sudden tightening would create a recession but would probably be insufficient to create a crisis of sufficient scale and length to discredit the old elites and force the type of historic structural transformation Maekawa, Mieno, and later Fukui, Yamaguchi, Hayami, and their colleagues talked about. Finally, the Ministry of Finance had just committed itself to lowering interest rates and stimulating the economy at the Plaza agreement. Thus the option to loosen window guidance drastically was really the only feasible one to implement the ten-year plan. It also offered the additional benefit that any criticism or leaks by bankers, central bankers, or journalists (as happened, and as we recorded) could be talked down easily by explaining that window guidance had to be consistent with MoF's policy of low interest rates.

Deductive logic therefore forces us to conclude that the only way monetary policy could have been used "immediately" in the 1980s to work toward the achievement of the transformation of Japan by 2000 involved the second option: to use window guidance to create a speculative bubble. There would be no political opposition to this move, and hence there would be no resistance to the creation of the ensuing crisis. By opening the monetary taps and flooding the economy with money, even the opponents of change would initially do so well that they would not complain. The easy money would effectively buy them. During the bubble period, corporate profits soared, real estate speculators and banks made fortunes, politicians creamed off large sums as party contributions, and the Ministry of Finance was overjoyed about the unexpectedly large tax revenues. The lush funds boosted expense accounts throughout the country. The old elite of business, bureaucrats, and politicians was satisfied, thanks to the pleasures of the economic boom. Few were wise enough to see the dangers and refuse the easy money that was on offer. The result was that a massive crisis struck when the bubble was burst. Similar to the experience of Midas, who perished due to his golden touch, the easy money of the 1980s had a high price.

Maekawa and his princes Mieno and Fukui controlled what probably were the only levers powerful enough to change Japan. Maekawa passed away in 1989, but his successors remained in power. Mieno and Fukui first boosted borrowings of the nation so that they by far exceeded national income growth. Having created a speculative bubble, the very same princes then made sure it burst in a spectacular and shattering way. As soon as the princes closed the monetary taps, it was inevitable, as Mieno testified in 1993, that a recession would follow. Excessive credit turned into bad debts. The paralyzed banking system would then cause a credit crunch recession. As we saw, the princes could easily have ended the recession, but they did not do so. Meanwhile, all

public eyes were on the politicians and the Ministry of Finance. Few suspected the role of the Bank of Japan.

Just like Hjalmar Schacht's Reichsbank in the 1920s, the Bank of Japan has acted like a "second government" in the pursuit of a political agenda of systemic change.

External Motives

There is additional information on the motivation of the princes. The goals pursued by the princes were virtually identical with the goals demanded by the United States. American pressure on Japan to change its system mounted from the late 1970s onward. First, the United States made its demands known in negotiations with Japan. In a long string of meetings and agreements, from the yen-dollar talks in the early 1980s to the Structural Impediments Initiative toward the decade's end, the United States demanded that Japan change its economic structure in order to open up its economy for foreign imports and to introduce an economic system that is nominally modeled on the free market principle, as in America. The princes had always relied on direct intervention in the credit markets in order to manipulate the economy. Their continued use of window guidance credit allocation even in the 1980s shows that they very much believed in the power of bureaucratic intervention and "guidance" of the economy. Yet, since the 1980s, they also seemed to be in favor of deregulation, liberalization, and an abandoning of direct intervention in the economy.

The close match between the ten-year plan and the demands by the United States on Japan may be pure coincidence. We do know that Prince Ichimada had been selected by the U.S. occupation and had close friends in the United States. His senior, credit controller Araki, moved from being a suspected war criminal straight to the post of Japanese ambassador to the United States. They, in turn, handpicked their successors early, thus establishing deep loyalty.

While the postwar policy of the United States switched in the early postwar era to maintaining the mobilized war economy system, this had changed by the early 1980s. The costs to the United States of the successful war economy system were appreciating. So the United States gave the go-ahead for Japan to change. This was no secret and was widely publicized at the time of the first yen-dollar talks. That was when Sasaki published his first plans for changing Japan. Soon afterward, his successors Maekawa, Mieno, and Fukui were all found to be advocates of the structural transformation of the Japanese economy. Some have been more outspoken in public and some less so, but since the 1980s they have all been keen to dismantle the war economy and open up Japan to the United States and the world.

The Prosecution Rests Its Case

What we have established is that Fukui, Mieno, and their colleagues were not insane, and that they were aware of the consequences of their actions when they created the bubble of the 1980s and when they prolonged the recession of the 1990s. Moreover, we have established that they had a widely publicized motive, and given that motive, their behavior could be explained as a rational course of action—indeed, the only one consistent with achieving their goals. In law, the judge or the jury would now look at the evidence and testimonials, deliberate, and announce the verdict. But Mieno, Fukui, and their colleagues are not in court. They are still at large. Their successors are in power. Indeed, today, as Prime Minister Junichiro Koizumi has adopted the Bank of Japan's structural reform agenda as government policy, Toshihiko Fukui is a member of the government's Financial System Council (while also being an adviser of Goldman Sachs) and, despite political resistance against him, remained a leading candidate to become central bank governor in March 2003.

In 1998, the Bank of Japan became legally more powerful, and is now virtually unaccountable. As a public institution, the Bank of Japan has responded to the raising of these issues with silence or misinformation (for instance, it still claims in public that window guidance was meaningless during the 1980s). Despite this book becoming a best-seller in Japan and being widely discussed, the Bank of Japan has not raised any objections in public to its arguments.

15 Back to the Future

The Return of U.S.-Style Capitalism

Recession Ended MoF Dominance

In the late 1980s, the bright, powerful bureaucrats at the Ōkurashō had been considered a dream catch for any Japanese bride. The man who could introduce himself with a business card, or *meishi*, from the renowned Finance Ministry elicited deep bows and hushed exclamations of awe and respect, not only from potential in-laws but also from society at large. But times have changed for the MoF men. Scandals have rocked the ministry. In early 1998, public prosecutors for the first time actually raided the most powerful of Japan's ministries. Frequent demonstrations have been held outside the ministry's doors by citizens disgusted by the bureaucrats' actions. Several senior bureaucrats have been arrested in the past few years, and several have committed suicide. In January 2001, the Ōkurashō was abolished. The remaining rump is a far cry from the powerful institution that it had been for over half a century.

As a result of the long recession and crisis of the 1990s, the princes of the Bank of Japan won their decades-old war with the Ministry of Finance once and for all. Since all traditional policies to revive the performance of the old system seemed to fail, the system itself was blamed. A number of commentators, initially from abroad, later homegrown, claimed that Japan's troubles were due to the fact that Japan did not follow the free market model. To them it was no wonder Japan was in recession, what with powerful bureaucrats setting a plethora of regulations and maintaining a cartelized and closed domestic economy, companies ignoring the demands of shareholders for profitability, frozen labor market structures with lifetime employment, a corporate sector burdened with debt. To neoclassical economists, the real surprise was that the Japanese system had not collapsed earlier. As the symbol of the old economy, MoF was blamed for the lost decade, the escalating fiscal crisis, as well as the creation of the bubble. It was accused of incompetence and, worse, corruption.

As a result, MoF had no more standing to defend itself. It fell prey to politicians eager to gain credibility by bashing the best scapegoat about: the Min-

istry. By late 1996, MoF had lost the battle for regulation policy, having to concede a full-blown deregulation of the financial sector, known as the "Big Bang." This abolished the license system, one of MoF's main power bases. By early 1997, MoF had lost the battle again, this time for supervision over the banking system. It was decided that beginning in June 1998, this task would be handed over to an independent Financial Supervisory Authority. In a previously unthinkable move, MoF's banking bureau and securities bureau were abolished. The new FSA began business with a vengeance in June 1998, closing two *amakudari* banks, LTCB and NCB. By late 1997, MoF had also lost the battle for political initiative, so that since then all decisions on fiscal and regulatory policy have been made by LDP politicians.

Most importantly, MoF had lost the battle for the key control lever, monetary policy and oversight of the Bank of Japan. In June 1997, a revised Bank of Japan Law was passed, which became effective in April 1998. This finally gave the Bank of Japan what it had been struggling to gain for half a century—independence from MoF, and, for good measure, from anyone else (more on this in chapter 18).

What if the Bank of Japan Is Right?

But we have found that the princes pursued goals much grander than just breaking up the ministry and becoming legally independent. Their goal has been the structural transformation of Japan's economy. While it is one thing to criticize the way they may have pursued this goal, what if the ultimate goal, to change Japan's economic structure, was not so bad after all, and perhaps in the long-term interest of Japan and the rest of the world? And if, as is quite possible, their particular monetary policies were the only way to implement this structural reform, then perhaps the central bankers have been doing the right thing all along. Certainly the press, especially the foreign press, though by the late 1990s increasingly aware of the use of monetary policy to implement structural change, seems to approve and expresses no surprise or shock that Hayami "fears that if he loosens policy too quickly, it would remove the pressure for reform."[1]

Leading politicians have now also explicitly adopted the old structural reform agenda and seem sympathetic to the idea of creating hardships to facilitate the reform process. The politician whose script could have been written by the princes at the Bank of Japan is the declared reform prime minister, Junichiro Koizumi. At the Geneva summit in July 2001, when asked how he was going to balance cyclical and structural reform policies, Koizumi replied, "I *say*: 'no growth without reform.'... Because we have *decided* 'no growth without reform,' we cannot postpone reform and take cyclical stimulation policies. Some say recovery comes first, without reforms. *But if the economy recovers, the*

will to reform will disappear.... After the elections I will continue *with the plan* of 'no growth without structural reform'" (italics added).[2] It is noticeable that Koizumi did not claim that structural reforms are *necessary* for a recovery, in terms of economic causation. He had *decided* to declare "no growth without reform," which expresses the Bank of Japan's motto of the 1990s well. It is indeed merely a restatement of a phrase in the Maekawa report, which said that Japan urgently needed "to make a historic transformation in its traditional policies on economic management and the nation's lifestyle. There can be no further development for Japan without this transformation."

Of course, it is clear that the bad performance of the economy during the 1990s is not a good reason to implement structural changes. During the 1990s, the Bank of Japan has argued that stimulatory monetary policies would be counterproductive to its long-term goal of structural change precisely because they would be effective in achieving their goal of creating a recovery. This, however, recognizes that the economy *would* respond to cyclical policies, and hence admits that the bad performance of the 1990s is not a reason to change Japan's economic structure. In other words, by admitting that a short-term downturn may be necessary to implement structural changes, proponents of structural reform deprive themselves of their main argument for just why structural reform is necessary. The Bank of Japan effectively agrees with many of its critics that the economy, in an unreformed state, could have produced higher growth than has been the case for much of the 1990s. If this is the case, then why does the Bank of Japan want to change Japan's economic structure?

Could the motivation of Maekawa's ten-year plan justify the Bank of Japan's actions? It argued that in a globalized and internationalized world economy, Japan could not continue its closed, export-oriented economy. It had to open up to the world. Equally importantly, it also argued that changing Japan's economic structure would not only end trade friction, but also raise the standard of living and the quality of life in Japan and boost Japan's economic growth rate. Was this claim just good salesmanship, to appease a conservative population that would resist change? Or is there some truth to it?

Pillars of Growth

Japan's postwar modification of the war economy was hooked on success. It needed continued high growth in order to remain viable as a system. As we saw, in Japan's war economy the profit motive had been replaced by the goal of market share expansion. Shareholders received low dividends but were rewarded by rising share prices, reflecting the reinvested profits. So continued growth was necessary to keep shareholders content. The same applied to managers and employees. In the war economy system they were motivated by moving up the corporate ladder. Pay scales at large firms began modestly but

rose quickly. To keep the promise of lifetime employment and ever-rising salaries, continued high growth was necessary. Finally, high and rising standards of living would appease the population, which had little political say in the system—and a lower quality of life than in Europe or America. In other words, the war economy needed high economic growth to satisfy all interest groups.

Growth, however, was ultimately based on exports. Although they accounted for less than 15 percent of GDP in the 1990s, their importance had been larger. Domestic demand had been suppressed and domestic prices kept artificially high to increase savings. The goods that were produced with the overinvestment had to be sold abroad.

Without continued growth, the system was unsustainable and would have to be modified at the very least. The ability to grow fast rested on two pillars. One was a world trade system (read that of the United States) that allowed Japan to eat into everybody else's market share. In exchange for the strategic military benefits, the United States allowed the continuation of the war economy. The second pillar was the ability to constantly allocate new credit to productive sectors. MITI helped in their identification. Drawing on its advice, the BoJ princes allocated credit. Unproductive sectors could not obtain purchasing power. This way Japan quickly moved up the value-added ladder, from textiles to steel to automobiles to semiconductors and consumer electronics.

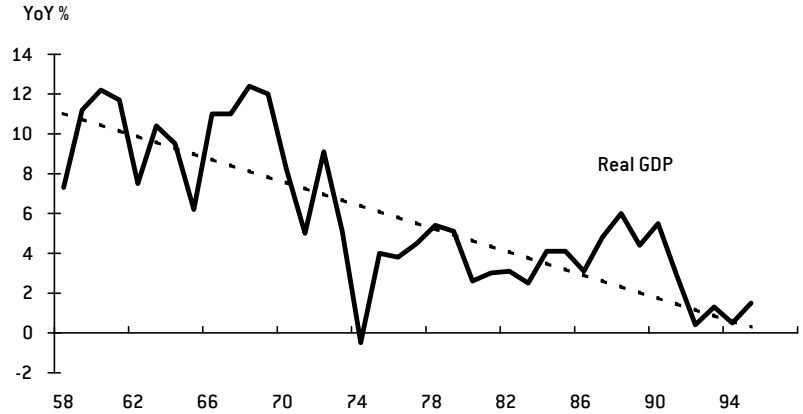
Crisis of the Miracle Model

Both pillars of growth started to crumble in the early 1970s. Beginning in the 1980s, when the costs of Japan's export drive became too large for the United States to bear, all U.S. administrations have been demanding that Japan abandon its export orientation and open its markets. With the end of the Cold War, this policy change became much more urgent, as the political and strategic benefits of a strong Japan were also reassessed.

Japan could not ignore the foreign cry for change: Suffering from Japan's trade surpluses, the world could close itself off from Japanese imports. For a long time this threat seemed only theoretical, with Japanese goods having become so dominant in many sectors that a boycott would be unthinkable. However, the creation of trade blocs and strong Asian competitors had changed the equation. Despite skepticism, Europe forged monetary union. North and South America are scheduled to be united in a single free trade zone in 2005, likely to be followed by monetary union some time later. Such large trade blocs could become autarkic, or at least independent from Japanese goods.

The second pillar of growth, the constant upgrading to higher-value-added activities, was also showing its age. In the past, all the new high-value-added areas, from automobiles in the 1970s to semiconductors in the 1980s, had been within the manufacturing sector. Now Japan had reached the top of the manufacturing value-added pyramid. Despite maximum rationalization and

Figure 15.1 **Japanese Real GDP Growth**



Source: Economic and Social Research Institute; Cabinet Office, Government of Japan

heavy investments, the incremental additional value produced by even the top-end manufacturers was leveling off. The growth potential of manufacturing was diminishing.

The main factor inputs that are used in an economy are land, labor, capital, and technology. The war economy system is probably the most efficient at mobilizing these inputs in the shortest possible time and ensuring that they are used for whatever activity is considered high priority. As more and more people joined the labor force, as more land was used productively, as capital investments were increased, and as new technologies continued to be introduced from abroad, economic growth remained high. However, in the 1970s, after decades of high growth, Japan was approaching full employment of these factor inputs.

Worse, the quantity of inputs started declining. The workforce participation had reached a peak and, due to an aging society, was approaching the point where it would fall. Land is fixed, and it was hard to raise its productivity (although decentralization and regionalization would provide an answer). Capital investment had reached a level where any further increases led to diminishing returns. Technological inputs were much harder to come by now that Japan's technology had caught up with that of the world leaders. Instead of copying or licensing, expensive and time-intensive research and development was now needed.

Japan was running out of inputs. Consequently, the war economy system could not deliver high growth anymore. Beginning in the 1970s, Japan's economic growth rate dropped sharply: While growth averaged 8.7 percent in the

1950s and 10 percent in the 1960s, it only clocked up 6.0 percent in the 1970s.[3] As can be seen in Figure 15.1, statistically, Japan's growth rate has been on a sharp downward trend since. On the basis of the old reliance of input maximization in the manufacturing sector alone, economic growth would at best stagnate at the 1 percent level. The old high-growth system had turned into a slow-growth straitjacket.[4]

Not only the mechanics of the mobilized war economy system required continued high growth. Its rapidly aging society also made more than 1 percent growth necessary. The workforce will begin to contract soon, while the expenditure required for pensions and social welfare will soar. Since Japan had opted for a pay-as-you-go system whose excess revenues were squandered, this will place an enormous burden on a declining base of able-bodied workers.[5] There is now more than one pensioner for every two welfare contributors. The number of pensioners is rising so fast that drastic cuts in pensions and hefty increases in the contributions would remain insufficient. One suggested solution is to transfer the public pension liabilities to a private system of defined contributions to equity investment funds. But the only way to feed its aging society is to increase Japan's growth rate. If more wealth is generated, there is more to share with the elderly.

Raising Productivity

There were several ways Japan could break out of the slow-growth straitjacket. Japan's economy had relied on maximizing inputs in order to maximize growth, but economic growth is not just the result of the quantity of inputs; it also involves the quality of their use—productivity. Since the war economy system is based mainly on the mobilization of factor inputs, the Japanese economy had hardly tapped productivity as a source of economic growth. Japanese exporters are famous for their efficiency and high-quality products. So it usually comes as a surprise to observers to learn that in international productivity comparisons, Japan ranks very low down the list, far behind other nations.[6]

Productivity is a function of the right incentives. And the best incentive tends to be competition. The export sector had always been exposed to the harshest competition that exists—the world markets. That is why Japanese exporters have been highly productive. But the majority of employment is accounted for by the domestic demand-oriented industries. The wartime system kept the domestic economy cartelized and closed. While competition for ranking existed, it was limited through the cartels. Thus productivity was not as high as it could have been, especially in the nonmanufacturing sector. Given its large share of the economy, this reduced Japan's overall productivity.

This presented Japan with an opportunity. The solution to Japan's problem

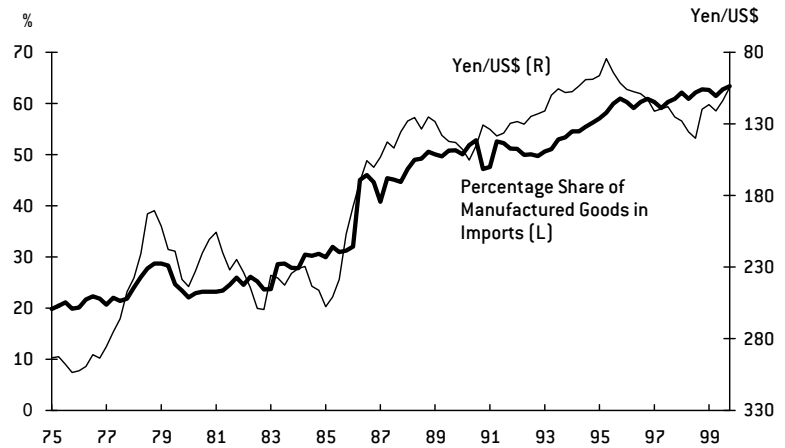
of a declining growth rate was to increase productivity. If Japan managed to use its factor inputs more efficiently, it would be able to increase growth, even if their quantity was shrinking.

Productivity could be raised in several ways. One was to retool the economy by shifting from export orientation to an expansion of domestic demand, especially consumer-oriented industries. Another involved a move from an input-based manufacturing sector to an emphasis on high productivity and creative activities in nonmanufacturing, such as research and development, innovation, information-based activities, and the service sector in general. Such a shift would also be in line with the demographic trend—more pensioners mean greater demand for the domestic consumer, service, leisure, and welfare-related industries.

Thus Japan had to do what it had never done before in its modern history: turn services and domestic demand into the daily bread of economic growth. During the war, fast growth to maximize physical output was the priority. The service sector was not important and hence had not been afforded a prominent role. Quality of life was a luxury that could not be afforded. Hence investment in housing, public facilities, cities that are attractive to live in, a sustainable natural environment, short commuting times, and high pay in terms of real purchasing power were badly lacking. The system also did not allow much individual freedom, as that got in the way of the quick execution of collective goals. Open debate and the free expression of views was never a strength of the war economy system, whether at work or in public life. This muffled creativity in many areas.

The concern of the central bankers to raise Japanese productivity was probably genuine. Central bankers care about productivity, as it determines the maximum potential growth rate that an economy can achieve, given its factor inputs. They primarily control the nominal growth rate of an economy (via the quantity of credit creation). How much of that nominal growth will be real and how much will take the form of inflation is not clear. That depends on how much the economy is growing relative to its potential growth rate. Put simply, if nominal growth remains below the potential growth rate, then there are deflationary pressures instead of inflationary ones. Factories are idle and there is unemployment. In such a situation, it is possible to increase nominal growth (by increasing credit creation) without creating any inflation. If, however, the economy is growing faster than the potential growth rate, then prices will be pushed up and inflation ensues. This can be due either to too much credit creation relative to a given potential growth rate, or to a drop in the potential growth rate. So to keep inflation in check, central bankers take great interest in potential growth, and they generally support measures that can raise it.

Figure 15.2 **Import Share of Manufactured Goods**



Source: Ministry of Finance

When Maekawa and Mieno reflated the economy in the late 1970s, they probably noticed with concern that growth above 5 percent would result in inflation—much sooner than in the past. Japan's potential growth rate had dropped. With shrinking factor inputs, it became apparent that the long-term potential growth rate would continue to fall until productivity rose. The princes apparently were convinced that they could raise productivity by abandoning the war economy, deregulating, liberalizing, breaking up the formal and informal cartels, and opening up Japan's economy to the world. The structural reformers got what they wanted.

Endaka Accelerated Deregulation

The *endaka* (strong yen) that accompanied the tight money policy of the 1990s accelerated the shift of manufacturing bases into Asia and helped open up Japan's domestic economy to imports. The unprecedented shift of factories out of the country has virtually created a second Japan outside its borders. In financial year 1995, Japan produced more abroad than it exported from its shores.

Simultaneously, the strong yen boosted imports. A large part, of course, consisted of reimports from Japanese factories that had been shifted abroad. However, imports from Europe and North America have also soared since the mid-1980s. Japan's war economy was characterized by an unusually low share of manufactured goods among imports. The strong yen has changed that; Figure 15.2 shows that, driven by the strengthening yen, the share of manu-

facturing products among imports more than doubled from a low 26 percent in 1980 to 64 percent in 2000, a figure that is rapidly approaching the levels seen in Germany or the United States.

The relocation of factories offshore and the influx of manufactured goods, whether from Japanese overseas plants or foreign firms, forced change on the domestic economy. In order to compete with rising imports, firms had to lower prices, reduce inefficiencies, and increase productivity. To do that, employment practices had to change, staff were laid off, and consumer tastes had to be taken more seriously. New jobs had to be created at home in the new industries of the future. But thus far, domestic demand-oriented industries had been less efficient. With foreign products now gaining market share in Japan—from semiconductors to beer, from steel to cars—consumers would no longer be willing to pay high prices for the sake of strong exports.

How could the domestic and service-oriented sectors be made more efficient? The same way that in the past manufacturing exporters became efficient: through competition. With the manufacturing base shifting offshore, deregulation and greater import penetration became an important option to create new jobs. In turn, deregulation in one area created economic pressures for further deregulation in other areas. The effects of deregulation accumulated exponentially—painfully slowly in the beginning, but picking up speed sharply.

The Tide Turns to Transformation

In April 1995, thanks to the double crisis of economic slump and historic yen strength, the reformers at the BoJ, in MITI, and among the politicians managed to break the bureaucratic resistance against deregulation. The shock of the yen at ¥80/$ convinced even die-hard conservatives that Japan had no choice but to deregulate. Thus only weeks after the historic high of the yen, a far-reaching deregulation package was announced, consisting of a catalog of one thousand deregulation items. A "Deregulation White Paper" followed later in the year. Moreover, in 1996 and 1997, the reformers had won enough political support to push for their biggest challenge to the old war economy establishment: a full-scale deregulation of the financial sector. The Big Bang started in April 1998 with the deregulation of the foreign exchange law. That, indeed, symbolizes the end of the war economy, because, as we saw, it was the foreign exchange laws that began the introduction of the war economy in the 1930s.

Previously, only licensed foreign exchange banks could deal in foreign currencies. Now foreign exchange transactions can be undertaken by anybody. Capital can flow freely into or out of the country. The liberalization of stockbroking commissions, the blurring of the distinctions between different types

of financial institutions, and the opening up of the financial sector to players from outside as well as other fields inside Japan (such as retailer Ito-Yokado) bring fierce competition with global leaders onto the home turf. All the barriers against foreign firms had come down; the doors to the domestic financial sector and hence to the entire economy are now open to the world. Hence foreign firms took large stakes in leading Japanese firms—unthinkable a decade earlier. For example, Merrill Lynch took over the bankrupt Yamaichi Securities, the Travelers Group bought a quarter of Nikko Securities, and the U.S. fund Ripplewood bought once-mighty Long-Term Credit Bank.

Japan is shifting its economic system to U.S.-style markets, and that also means that the center of the economy is being moved from banks to stock markets. To entice depositors to pull their money out of the safe bank and postal savings deposits and into the risky equity market, reformers have withdrawn the blanket guarantee on all bank deposits and propose to privatize or abolish the postal savings system, while creating tax incentives for stock investments.

From Collectivism to Individualism

Since mid-1994, probably for the first time ever in Japanese history, the service sector employed more people than the manufacturing sector. Meanwhile, firms, forced to boost productivity, have switched from the lockstep seniority system to merit-based pay that could have large rewards for creative individuals. They have adopted flexible year-round hiring. As the educational system shifts gear from being one aimed at producing human inputs into hardware production by focusing on rote memorization to becoming one that encourages individuality and creativity, the social landscape will change as well.

In 1960, there were over one thousand legal cartels, granted exemption from the Anti-Monopoly Law. By 1998, deregulation had reduced the number to almost zero.[7] In addition to the official cartels, there were a number of special laws that had created barriers to entry in many industries. However, many of these have now been revised. The revision of the large-scale retail law boosted the number of consumer-oriented large-scale shops that are discounting heavily. In 1993, the telecommunications sector was deregulated, which created a significant boom in mobile phones and boosted employment in the information services sector dramatically. In 1996, the Electric Enterprise Law was changed to allow firms other than utilities to generate electricity. Other examples include the deregulation of the gasoline retailing law. Public prosecutors have also become tough on corporate racketeers, construction *dangō* (informal collusive agreements), and other practices that the war system had brought with it.[8] The Fair Trade Commission has been strengthened and made more meaningfully independent. Having previously acted in the inter-

est of the monopolists, it seems now to be seeking to restrict their influence. Japan's new product liability law of 1995 for the first time explicitly favors consumers. In case of dispute, the burden of proof has now been placed on the manufacturer.

Political System Change

The systemic change did not stop at the economic system. The numerous scandals that followed the bursting of the bubble also brought down the 1955 system of stable one-party rule by the LDP. In the old system, politicians did not compete by proposing different policies. Policy was made by the bureaucrats, and the politicians merely focused on appeasing local constituencies with public works projects. Since the Japanese electoral law had given the rural vote a much bigger weight—up to three times that of the city vote—this meant that politicians had to please rural constituencies in particular. That gave the agricultural lobby its power over government policies. The 1993 Hosokawa administration changed the electoral system and thus politics, which is now catering more to city dwellers. Imports of agricultural products rose. The rice market was forced open in 1993, thanks to the government's reduction in official rice supply stocks to the lowest level on record in the postwar era. This allowed bad weather to create a rice shortage, and public opinion was influenced favorably toward the liberalization of rice imports.[9]

Politicians, with their power bases increasingly in the cities and not the rural farms, found that voters liked the idea of a higher quality of life and standard of living. Thus politicians of almost all parties have since the mid-1990s been competing to present themselves as radical reformers. They have started to take power away from bureaucrats and increasingly make the key decisions. In October 1997, for the first time in postwar history, all policy initiatives to stimulate the economy originated from politicians, not bureaucrats.

The arrival of the Koizumi administration was a reminder of the popularity of the earlier reformer government under Hosokawa. By now, however, the consensus toward a deep structural transformation of Japan had become deeply engrained. Koizumi's popularity was also a much more important factor for him in retaining his position: For the first time a prime minister was in power due more to his general popularity with the voters than his support among the LDP factions.

The Ten Years That Changed Japan

Maekawa's ten-year plan effectively called for Japan's economy to revert to the freer markets that existed in Japan in the 1920s and to turn the producer economy back into a consumer economy. Thanks to the policies taken by the princes, all the main goals had been achieved by the end of the 1990s. Fore-

most among them, the Ōkurashō had been considerably weakened and the BoJ had become independent in 1998. With this, bureaucratic resistance to deregulation had been broken. But this was not all. The plan to change Japan had set in motion economic forces that continue to work today. The bubble accomplished three things: First, it taught Japanese consumers that spending money could be enjoyable. During the late 1980s, conspicuous consumption appeared for the first time in postwar Japan. Though centered on the rich speculators, it took away the social stigma that conspicuous consumption had had for decades. The second result of the bubble was to send a wave of Japanese foreign investment abroad, partly to shift factories offshore. Third, the bubble set the stage for the recession, which continued the reeducation: It taught consumers newly acquainted with the joys of shopping to demand value for money. Thanks to the deflation of the 1990s, "price destruction" appeared for the first time and discounting spread widely. The recession also initiated deep structural changes in the economy, as companies were forced to lay off workers, unemployment was pushed up, and Japan's traditional lifetime and seniority-based employment system was eroded.

Striking at the Core of the War Economy System

As we saw in the early chapters, when the war economy system was established, the reduced influence of individual shareholders through diluting cross shareholdings put managers in charge and allowed them to pursue growth irrespective of dividend payments. Firms could afford to maintain cross shareholdings even if stock prices fell, because Japan was using German-style book value ac- counting. Without pressure from shareholders, firms could plan for the long term and grow fast. Book value accounting had the additional benefit that it shielded companies from unnecessary volatility due to stock market movements. This contributed to overall economic stability.

This system of capitalism without capitalists had become increasingly embattled during the 1990s. The collapse of share prices and the credit crunch forced many companies to sell off cross shareholdings that had been created during the war and in the postwar era. That meant the return of shareholder power. At the same time, with Japanese equity prices on a falling trend in the 1990s, and with the Nikkei 225 index having closed at a twenty-year low on the last day of 2002, foreign investors have seized the opportuntity to buy the ownership of Japanese companies—something that had not been possible in earlier decades. In March 1999, the share of stocks listed on the Tokyo Stock Exchange that were owned by foreigners reached a postwar record high of 14.1 percent. By March 2001, this had risen to 18.3 percent, a long way above the 2.8 percent foreign ownership recorded in 1978.[10] The protective structural barriers against foreign takeovers built up in the early postwar years were

increasingly crumbling. Foreign institutional investors now demand higher dividends and better returns on assets than the old-style Japanese corporation was willing to deliver.

The Return of the Capitalists

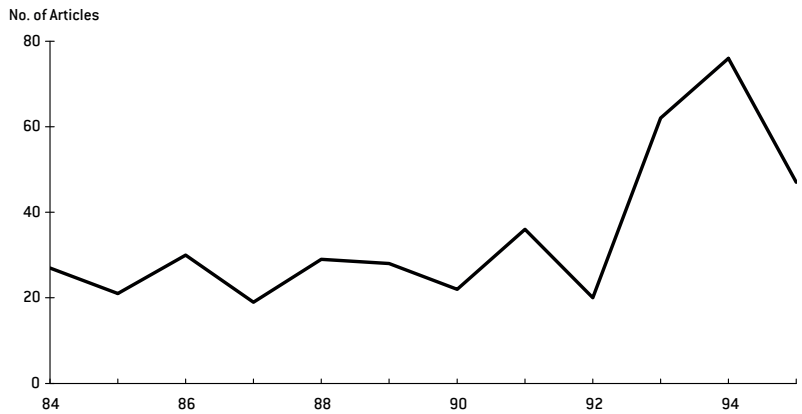
Battered by criticism, the Ministry of Finance also agreed to adopt a radical change in Japan's accounting standards. Fiscal year 2001 was the first in Japanese history that company books were calculated according to market value accounting. MoF, by this time keen to please critics inside and outside Japan, was persuaded to adopt "international best practice" by dropping book value accounting in favor of U.S.-style marking to market. It did not bother MoF that the majority of industrialized countries have not yet adopted this accounting standard, which is first and foremost a U.S. standard.

The change to market value accounting may sound like a fairly innocuous move by gray accountants. But with this seemingly harmless change in accounting rules, the bookkeepers made significant progress where decades of colorful U.S. trade negotiators had failed. The change sharply accelerated the transformation away from the war economy corporate governance structure and toward shareholder capitalism. Since companies and banks were made to suffer for owning underperforming shares, they had a strong incentive to dissolve their cross shareholdings. Thus they have been dumping their previously stable stock holdings in fire sale operations that peaked especially around book closing, such as in March 2001 and September 2001—each time exerting strong downward pressure on the stock market. Plans were announced to legally require banks to reduce their stock holdings further over several years. This completes the unraveling of cross shareholdings that has been taking place throughout the 1990s. By 2005 the corporate governance landscape will be reshaped—the main bank system is becoming history. Cross shareholdings will have become the exception, not the rule. As a result, accountability to shareholders is beginning to become a reality for the first time since the 1920s. Corporate management is becoming increasingly profit-oriented, and companies are run for the benefit of shareholders, not managers and employees. Capitalism for capitalists has returned to Japan.

Change Is on My Mind

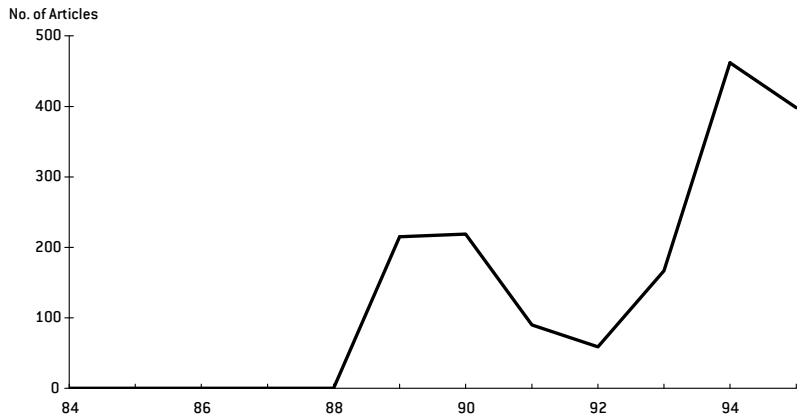
Before countries change, mind-sets must change. There can be no doubt that the new consensus against the postwar system emerged as a result of the recession. There may be a way to quantify this. Considering the four *Nikkei* newspapers in Japan and counting the number of articles in a year that were devoted to three key topics of structural change, we find evidence of such change.[11] Figure 15.3 shows that articles on *amakudari* (bureaucrats parachuting into

Figure 15.3 **Articles with Keyword "Amakudari" in the Nikkei Newspapers**



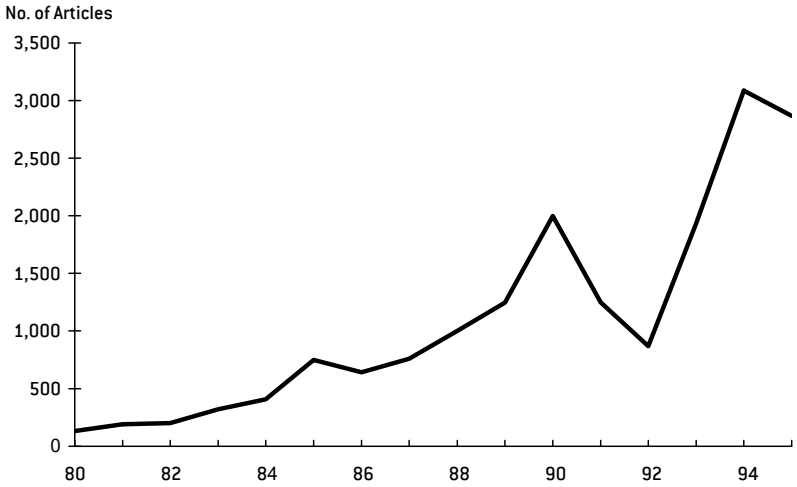
Source: Nihon Keizai Shinbun

Figure 15.4 **Articles with Keyword "Foreign-Domestic Price Differential" in the Nikkei Newspapers**



Source: Nihon Keizai Shinbun

Figure 15.5 **Articles with Keyword "Deregulation" in the Nikkei Newspapers**



Source: Nihon Keizai Shinbun

private-sector positions and hence informally controlling the industries they have previously supervised) began to soar from 1992 onward. The foreign-domestic price differential (Figure 15.4), a reflection of Japan's closed, export-oriented economic structure, became a buzzword from 1992. Discussions of deregulation (Figure 15.5), with several thousand articles written in a year, really took off in 1992. One may wonder what happened in that year. The simple answer is that 1992 was the year when the recession started. As a result, the old economic structure was criticized and a fundamental rethinking began.[12]

The postbubble recession of the 1990s succeeded in shifting the consensus from being in favor of the wartime economic system, as was still the case in the mid-1980s, to its diametric opposite. Today, most intellectuals in Japan have come to agree with the slogan of Prime Minister Koizumi, who started his reform-oriented administration in 2001: no economic recovery without structural change. It has become a consensus in Japan that the old system does not work anymore and has to be scrapped.

Observers even began to wake up to the wartime roots of the postwar system—and that seemed to further condemn it. An editorial in the widely read *Yomiuri* newspaper suddenly thundered in mid-2000, "In the ten years since the collapse of the bubble economy, the government has tried every financial and fiscal policy possible. But the economic slump is still continuing because the government has never attempted to revamp the fatigued economic and

social systems of the wartime regime."[13] The ten-year slump seemed evidence enough to most observers that the postwar system did not work anymore.

There can be little doubt that later historians will conclude that the slump of the 1990s marks a historic turning point in Japan's economic, social, and political system. Believing that the system itself was to blame, policymakers scrapped the structure that had created the postwar miracle economy. They abandoned the war economy system. Japan is now well advanced on the path to implementing U.S.-style capitalism. It appears as if the Bank of Japan has done the right thing, after all.

Shareholder Capitalism or Welfare Capitalism?

Even if we ignore the inappropriate way in which the central bank facilitated these structural changes, there are two reasons why its actions were not justified. First, there was an alternative for Japan to introducing U.S.-style capitalism.

The problem of falling factor inputs and low productivity that Japan experienced beginning in the 1970s did not mean that the old system had to be abandoned. It could simply have been adjusted. All that was needed was to use the key control tool, credit creation, to supply the nonmanufacturing and service sectors, especially high-value-added activities such as education, research and development, information services, software development, and telecommunications, as well as welfare-enhancing projects such as housing and public facilities and environmental projects and industries, with new purchasing power. Incentive structures could have been redesigned to allow for a greater degree of individual freedom and public debate. Purchasing power allocated to low-productivity activities, such as the traditional distribution system, sunset manufacturing industries, and the like could be slowly phased out, thus producing a natural shrinkage of these sectors and efforts to restructure or relocate offshore.

With such credit policies, the emphasis of Japan's economic system would quickly change. The structure of the miracle economy, based on capitalism without capitalists and competition for size, not profits, could be maintained. As long as the key control tool, credit creation, was under democratic supervision, Japan's economy could then continue to deliver high economic growth while at the same time enhancing the standard of living and quality of life of its population, continuing an egalitarian ownership and safeguard its achievements in terms of social justice. The war economy system has helped Japan avoid the disadvantages and significant human costs of free-market-style capitalism, namely, great income and wealth inequalities, high unemployment, high crime rates, and social injustice of many kinds. These advantages could be maintained if the system as such was kept but updated to suit the times.

Such a transformation of a war economy system into a successfully modified and modernized structure has a historical precedent. In the early postwar decades, Germany underwent a similar structural break when, under Ludwig Erhard, it made the conscious decision to preserve the advantages of the economic system established in the 1930s but improve it by shifting its goal further away from output maximization to raising the standard of living of the population.

German Model

The result was a combination of the collectivist war economy and the U.S.-style free markets. Worker protection and participation in corporate management remained high, ensuring that the profits produced were divided fairly between the three stakeholder groups, shareholders, managers and employees. The financial system remained centered on banks, thus allowing allocation of newly created credit directly to productive corporations. Speculative loans to the real estate sector were kept low by regulatory control that implied low loan valuation ratios of real estate-related lending. At the same time, entrepreneurs were rewarded far more than the war economy system allowed. Thanks to the corporatist structure, worker representation ensured that a reasonable share of corporate profits would go to workers and employees, not just fat-cat capitalists. As a result, the income structure remained far more egalitarian than in the United States. Most of all, resources were allocated toward raising living conditions.

The Germans called this hybrid economic system the *soziale Marktwirtschaft*, or social market economy.[14] The postwar transformation succeeded beyond expectations, as the high growth rates of postwar Germany, also dubbed a "miracle economy," attest. Taking purchasing power, size of houses, distance to work, working hours, cost and quality of education, and other such issues into account, there can be little doubt that the quality of life and standard of living of the average German is among the highest of the industrialized countries, exceeding that of the average American.

Japan could have opted for going the German way in the 1990s. But there was another way to enhance productivity: entirely abandon the war economic system. By freeing the domestic economy from regulations and cartels, by abandoning the seniority pay system, and most of all by making the shareholder the ultimate lord over the firm again, entrepreneurs could be given incentives to start up new, creative firms in the new service industries. Productivity could be boosted by reversing the half century of war economy and reverting to the free-for-all style of capitalism that existed in the 1920s. But in that case, all advantages of the egalitarian "Third Way" system would be lost, and Japan would also import the disadvantages of unmitigated capitalism that its leaders sought to avoid in the 1930s.

No Public Debate: The Princes Decide for You

Given the significance of the decision whether to reform and improve the war economy system or abandon it entirely and introduce free markets, a widespread public debate would have been crucial. Of course, the cost of changing over from one system to another would have to be added into the calculation, tilting it in favor of going the German way. Ideally, the population would be asked and a decision would be reached in a democratic fashion, based on fair and objective information. In reality, there was no public debate. Very few people were even aware of the issues that were at stake.

The early postwar leaders knew that they were running a war economy, but they chose not to talk for political reasons. The Cold War propaganda message was that postwar Japan had adopted a U.S.-style political and economic system. Unwilling to tell the truth, the leaders, including the Showa emperor himself, took their intimate knowledge about the origin of Japan's miracle economy with them to the grave. A generation of bureaucrats and politicians reigned in the 1980s and 1990s who did not even understand the true character and purpose of their own country's economy. Likewise, leading thinkers in the United States have little knowledge about the character of Japan's war economy, its advantages and possibilities. Ironically, a whole generation of Japan's elite had been sent to the United States to receive Ph.D.'s and MB As in U.S.-style economics in the postwar era. They arrived back in Japan trained in the theories of the free markets. Yet they had never, received any formal training in the principles of their own economy. In the postwar years—partly due to the need to cover up its roots—there had not been a proper theory of how the Japanese war economy system worked and what its advantages were.

Since neoclassical economics assumes that there is only one type of economic system, namely, unmitigated free markets, where shareholders and central bankers rule supreme, the young, bright Japanese elite quickly came to regurgitate the arguments of U.S. economists. When U.S. commentators were demanding that Japan change its system, neither economists and business leaders nor bureaucrats and politicians in Japan were able to counter U.S. arguments. Many older Japanese leaders instinctively felt that the Japanese system had served the people well and so should not be hastily abandoned. However, they failed to provide a convincing rationale for their arguments. U.S. leaders, drawing on decades of research into the free market theory, had an easy time winning the public debate. Thus there has never been a debate about whether Japan's productivity should be enhanced by reforming the old system or by abandoning it. Those in charge of window guidance never gave such a debate a chance.

Reform Costs Excessive

When considering the option of modifying the Japanese system and entirely scrapping it by means of a long and deep recession, any cost-benefit analysis would have to conclude that it does not make sense to purposely prolong a recession, even if structural benefits emerge in the long run. To use a simple analogy: Cyclical policies aim at economic growth, hence at boosting the size of the national income pie. Structural policies aim at efficiency, which is the ease with which a given pie is cut up and allocated. While structural reform may indeed succeed in marginally increasing the efficiency of the economy, as measured by certain indicators, it seems clear that the enormous economic and social costs of the ten-year recession have greatly outstripped the potential benefits. To prolong the recession for the sake of implementing structural change is akin to shrinking a cake to a tiny size in order to be able to cut it up more easily.

Forward to the Past

Many observers are still convinced that the reform plans of Junichiro Koizumi, who became prime minister in April 2001, would be positive for Japan. Among them he gave prominence to his demands that various publicly owned companies, most notably the post office, ought to be privatized. This is indeed the most concrete reform plan, and one that Koizumi has proposed throughout his career. Yet it is difficult to see how such a reform will affect economic growth. Ownership of the public entities has not changed in the postwar era or even over the past century. Yet economic growth has changed. Japan moved into recession in the 1990s, although there was no increase in ownership of public corporations. Over the long run, if anything, one may detect a positive correlation between growth and the existence of these public institutions—their creation provided some of the infrastructure for Japan's phenomenal economic growth.

What, then, is the attraction of privatization? It is often argued that privatization increases efficiency, as market forces will make those firms more productive and profit-oriented. Yet Japan's public-sector employment as a share of total employment remains modest by international comparison. Moreover, the quality and reliability of public services must rank among the top in the world.

It is true that selling the public utilities to private investors is likely to boost the profit orientation of these entities. But is this necessarily a good thing? Private-sector firms look after the interests of their owners. To avoid this is precisely why public-sector institutions were created: They are supposed to

work in the interest of the public. It is well known that markets cannot effectively manage goods from which everyone can easily benefit, namely, such public goods as the environment, education, and public infrastructure (such as parks, roads, and postal services). Private owners would not invest as much as is socially efficient. This market failure is why public goods usually are kept in the hands of the government. This is also true for industries with a natural monopoly that can only sustain a small number of firms. Leaving their operation in the hands of the private sector would lead to monopolies that disadvantage consumers by pushing up prices and reducing the amount and quality of services.

Japan introduced a publicly owned postal service because it is beneficial for society if the post office services all regions, even remote ones, at the same price. To boost profits, a privatized postal service will no doubt close a large number of offices. Prices of all postal services are likely to rise, while many unprofitable but convenient services are likely to be canceled. Transaction costs for the general public will increase. What is efficient for the new private owners will in part be inefficient for the public. As a result, privatization will most likely shift money from the pockets of ordinary citizens into those of the new shareholders.

The same applies to education, which is the foundation of economic development in any country. To boost Japan's long-term growth rate and benefit the majority of the public, Japan created public schools and universities, which have very low fees. The highest overall level of education can be achieved in an open, merit-based educational system that offers equal opportunities for everyone, no matter how wealthy one's parents are. This has been one of the pillars of the successful egalitarian, classless societies that boast high standards of living, such as Sweden, Germany, Japan, and other Asian countries.

Koizumi is now proposing to move Japan more in the direction of Britain, where the educational system has not adequately dealt with the bias against the less well off and where the privatization of public corporations has not visibly worked in the interest of consumers and the general public.[15]

A lingering worry is that public institutions do not motivate their staff properly, which privatization could change. Indeed, if there is underperformance, something should be done about it. But the performance of staff can be increased by implementing the right incentive structures without changing ownership. Apart from the ownership, the differences between public and private bureaucracies are in any case small: large firms are in their structure similar to civil service bureaucracies.

The End Does Not Justify the Means

We have examined the case that, perhaps, the Bank of Japan's means to achieve its end could be justified by the positive nature of that end. However, this

argument does not hold. There is therefore no good economic rationale for pursuing the types of policies that the Bank of Japan has pursued over the past decades. This leaves us with the fact that the decision on structural reform is ultimately a political one. Irrespective of the ultimate goal, the question here is whether the implementation of a long-term structural change agenda that affects income and wealth distribution, social and economic institutions, and society in general is really the task of unelected central bankers. Nothing in the Bank of Japan Law, old or new, has ever awarded the central bank such a mandate. In Posen's words: "No Japanese citizen elected the BoJ to pursue this policy of promoting restructuring, and in fact no elected official delegated this task to the BoJ or put the goal of 'encouraging creative destruction' into its mandate."[16] To create public consensus on the "need" for structural reform by purposely creating a recession must constitute an abuse of power.[17]

Reflation

Another Miracle in the Making

Investment Implications: Positive Outlook on Japan

Having analyzed the events of the past, and having criticized where critique is due, this chapter is addressed to investors and businesspeople who are interested in identifying the implications of our findings for investment strategy. The conclusion first: Contrary to popular opinion, Japan's recession is not the result of deep problems with its system. It has been artificially created by the Bank of Japan to implement its structural change agenda. This also means that whenever the princes at the central bank decide to reflate, a recovery could be far stronger than many observers would expect. Moreover, in terms of sectoral investment allocation, the structural reform agenda implies that the ongoing changes in Japan are significant, they are likely to continue and they offer historic business opportunities for overseas companies. The upshot is that Japan must not be written off. To the contrary, it presents an unusually attractive prospect. The second largest economy of the world, so far largely closed to foreign businesses, is now significantly opening up. Moreover, the recession has reduced prices in Japan, rendered rents and real estate affordable by international comparison, and has artificially damaged the health of Japanese competitors. Not to take advantage of such a rare opportunity would be a grave mistake from the viewpoint of overseas businesses and investors.

From the time of the Mongols' attempt to invade Japan in the thirteenth century through Perry's Black Ships to the Plaza Agreement, there has never been a shortage of people ready to write Japan off. If history is any guide at all, the major lesson is that it does not pay to underestimate the potential of Japan to adapt to, confront, and overcome new challenges. The recession and the yen strength provided the crisis mood that forged the consensus for deep changes and the incentives for corporate Japan to restructure. The structural changes have boosted productivity and hence raised Japan's potential growth rate. Four percent growth without inflation has become possible again.

Don't Trust the Consensus

In early 2002, ten years after the downturn began, Japan's economy was still mired in recession. Most economic indicators suggested a crisis similar to that of 1998. The Nikkei 225 equity index fell to an eighteen-year low. Just as in 1998, there were fears of a systemic banking crisis. Announcement of layoffs further depressed sentiment. After more than a decade of declining share prices, many investors were willing to write Japan off for good.

However, if we reflect back to the situation in 1998, when pessimism was most widespread and most economists were forecasting that Japan's GDP would shrink in 1999, in actual fact what followed was a stock market rise of more than 50 percent, and real GDP growth of 1.4 percent. Then, when forecasters had revised their forecasts up, growth slumped again in 2000 and the stock market fell, sending the Nikkei 225 below 10,000 in September 2001. Again, the consensus became staunchly pessimistic.

Most analyses and economic models are based on interest rates as the main explanatory variable. As we have seen, that can produce highly misleading results. In 1991, for instance, many investors and advisers were convinced that the Japanese economy would remain robust and the stock market would recover quickly. Almost all securities houses recommended that their investors buy Japanese stocks, and especially real estate and banking shares. The Bank of Japan had just begun to lower interest rates—and according to mainstream theory that had to stimulate the economy and boost stocks. But it didn't happen. Japan's economy slumped by historic proportions.[1]

Similarly, interest rates have been giving misleading signals about the U.S. economy. In 1991, for example, most economists were extremely pessimistic about U.S. growth. This pessimism continued throughout 1992 and 1993, when real GDP growth was forecast at between zero and 1 percent. The leading financial newspapers painted a negative picture of the U.S. economy, with liberal use of adjectives such as *sluggish, disappointing*, and *stagnant*. Many well-known economists were forecasting that the economy would actually slump back into outright recession.[2] The negative majority view even made political history: The prevailing pessimism over the U.S. economy is generally considered an important reason why in November 1992 George Bush lost his bid for reelection and Clinton could move into the White House.

But while the Wall Street experts were forecasting a long, drawn-out recession, the opposite occurred. With hindsight, we know that after the sharp recession in 1991 (with –1.2 percent real GDP growth), the U.S. economy embarked on one of its strongest and longest periods of growth in postwar history—real GDP growth between 3 and 4 percent in 1992 and the following years. Since interest rates rose gradually during the 1990s, standard models have continuously underestimated the strength of U.S. growth. What actually

drove growth was steadily rising credit creation. Likewise, the downturn of the U.S. economy was also signaled by the sharp reduction in Federal Reserve credit injections in early 2000.

The BoJ Reflated in 1998

The Japanese economy recovered temporarily in 1999, because the Bank of Japan suddenly—and, as it turned out, temporarily—switched on the printing presses on 31 March 1998, creating money at the fastest rate in a quarter century. One day later, the new Bank of Japan Law became effective and the Bank of Japan had achieved legal independence. Perhaps it was celebrating its victory?

The money newly created by the central bank was injected into the economy via purchases of government bonds and commercial paper. This was not immediately visible from the standard money supply indicators that the BoJ publishes. Central banks have no great incentive to publicize the details of their actions. While they publish a large number of financial data series, they greatly downplay data on their total credit creation. As a result, many investors and analysts focus on the short-term money market operations because these can be closely followed on a daily basis. However, they constitute only a part of the central bank's actions.

As we saw, the Bank of Japan's credit creation can be measured by adding up all the transactions of the central bank, including lending to the banking system, money market operations, long bond operations, foreign exchange intervention, sterilization operations, and so on. This is shown with my Leading Liquidity Index. As we saw in Figure 10.1, the Bank of Japan pursued a highly stimulatory monetary policy in 1998. With a time lag of approximately one year, the economy staged a surprise recovery in 1999. Meanwhile, the exchange rate reacted immediately—the BoJ's dramatic liquidity injections were the cause of the sudden drop of the yen, which fell to ¥147/$ in mid-1998.

At that stage, many currency models were predicting further substantial yen weakness. However, it was not meant to happen: The Bank of Japan reduced its credit creation sharply in 1999, actively withdrawing credit from the economy for most of the year. The yen moved back close to ¥100/$, and a year later the recovery of 1999 stalled. Economic growth started to decelerate in 2000. The stock market therefore also hit a high in the first quarter of 2000, and then more than halved, falling from ¥20,800 in March 2000 to ¥8,300 in November 2002.

Koizumi: A Man to the Princes' Liking

Why the Bank of Japan tightened again in 1999 is not immediately clear. What is clear is that thanks to the dramatic economic slump of 2000 and 2001

the structural reform agenda was further accelerated. As the recession got worse again, the administrative reform of January 2001 was pushed through on schedule, and Ōkurashō was scrapped in the process. Then in early 2001 the slump swept a new type of politician to power, and Junichiro Koizumi became prime minister. He arrived with surprising popular appeal. In terms of his popularity and his policies, he is often compared to Margaret Thatcher or Ronald Reagan. His message was simple: "No recovery without structural reform."

Reformer Koizumi is a man to the BoJ's liking, since he firmly believes in the need for structural change. Should such a prime minister not be supported? The Bank of Japan's princes may have sabotaged all previous governments through their tight credit policies. But they have less of an incentive to undermine the first prime minister who appears to fully share their structural reform agenda.[3]

That is why the princes switched on the printing presses again. In May 2001, purchases of commercial paper rose by over 500 percent YoY. Bond purchases increased rapidly. Our Liquidity Index was also propelled close to the high levels of March 1998 again. For the first time, Bank of Japan staff also hinted to the government that they might be willing to inject money into a public institution that would buy the banks' bad debts (as long as certain conditions were met, namely foreclosures that would create distressed asset sales and thus allow foreign "vulture" funds to expand in Japan).[4]

Bond Boom Bails Out Bust Banks

What about the banks? The latest initiative of a public entity that purchases bad debts from the banks will complete the bailout of banks. Even before that, the situation of most of the large banks improved dramatically in 1997 and 1998. This went almost unnoticed by the public. Abrief look at what happened in the United States from 1991 to 1994 will help to illustrate.

In the 1980s, U.S. banks lent too much to real estate speculators. We know that credit creation used for nonproductive purposes must eventually turn into bad debts. When that happened in America in 1991, U.S. banks were hurt and credit growth turned negative. As a consequence, GDP shrank in 1991. The U.S. newspapers frequently reported about a credit crunch.[5] As late as July 1993, Alan Greenspan warned that the "credit crunch phenomenon ... is not over" and that the economy faced "stiff headwinds" due to "weakening asset values" and "excessive debt burdens."[6] However, all negative forecasts turned out to be wrong. When it suddenly became clear that the U.S. economy was really recovering, the bond market crashed in February 1994 and stocks started to rise.

What had happened? When the Fed was faced with a credit crunch in 1991, it could only kick-start the economy by, first, printing money itself and, sec-

ond, making sure that bank credit creation would recover quickly. But even the top money center banks were on the verge of technical insolvency. The Fed was unwilling to let them default (of course, it did not hurt that many of the large money center banks are shareholders of the Fed). To solve the credit crunch problem, banks needed to write off their bad debts and restore their balance sheets. The big banks needed money, but it was politically out of the question to use tax money to bail out the likes of Citicorp or Chase Manhattan.

Profits for the Banks

As the Fed printed dollars and bought bonds, the banks also stepped up bond purchases. As both the central bank and the banking system were buying bonds, the bond market had only one way to go—up. Declining yields were a reflection of the fact that the central bank was reflating and banks were earning money through income gains as well as capital gains. All this meant, of course, that the economy had to recover, which in turn implied that the bond market was doomed to crash. It did. That caused huge losses for bond investors. Indeed, a few hedge funds went bankrupt. But how did the biggest holders of bonds fare—the banks? By the end of 1993, almost a quarter of their assets were government bonds.[7] Instead of being badly hit by the bond crash, many recorded large profits and could write off virtually all of their bad debts. That is not surprising if one assumes that the bond bubble had been engineered by the central bank to bail out the banks. Then it would not surprise anyone to find that the banks had sold their bonds at the peak of the market. Technically speaking, the banks still owned the bonds, since they were still on their books. Indeed, as the main owners of bonds, banks could not possibly have sold them in the cash market. So they built up short positions. In late 1993, many analysts became worried about the rapid expansion in U.S. banks' derivative positions. Off-balance-sheet derivatives were a multiple of total assets for some banks. Analysts were not quite sure what to make of these statistics and put them down to increasing sophistication of bank products and financial engineering. Instead, banks had mainly used derivatives to short the bond market. When the bond market crashed, they made appreciable profits.

Loan Statistics Distorted

Thanks to the profits made in the bond market, the banks could write off a large part of their bad debts. However, there is another irony: As the banks did just that in 1992 and 1993, most observers became even more pessimistic, as they noticed that bank loan growth by many money center banks had turned negative again. That is why worries about a credit crunch were virtually ubiquitous in 1992 and 1993. The reason for the misunderstanding is the impact

write-offs of bad debt have on banks' loan books: They suddenly shrink and, compared to the previous period, show a negative growth rate. However, that does not mean that credit creation is slowing.

Write-offs are purely an accounting exercise that has no bearing on economic activity. If, for instance, banks extend U.S. $50 billion worth of net new loans (loans minus repayments) but write off old nonperforming loans worth U.S. $60 billion, then their loan books will shrink and observers may believe that there is a credit crunch, when actually credit creation is rising. Only the post-write-off situation is made public and visible to investors. Thus, in time periods where ailing banking systems are bailed out, loan growth data have to be regarded with suspicion. This is also the experience in Sweden, where a sizable credit boom was followed by a credit bust.[8]

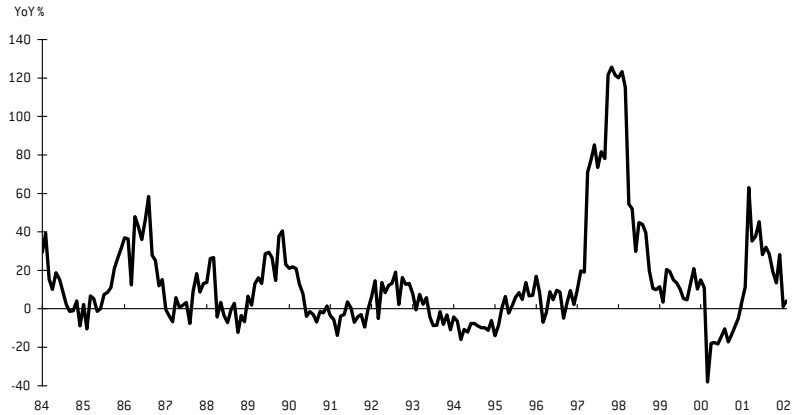
When most observers were writing off Sweden as a hopeless case with a bust banking system and a massive credit crunch problem, Sweden had gone through the worst; in 1994 it recorded growth of around 4 percent. Similarly, when most economists were expecting weak economic growth in the early 1990s, the U.S. economy surprised by continued and lasting high growth.

Large Banks Benefit from Bonds

The first Japanese bond bubble began in early 1995, when benchmark bond yields stood at 4.7 percent, and lasted until September 1998, when bond yields had fallen by four hundred basis points to an extraordinary 0.7 percent.[9] Large banks that were aware of the situation made significant capital gains, some beginning to rival the capital gains of the equity bubble of the late 1980s in Japan.

As in the United States, Japanese banks had been shorting the bond market, using derivatives.[10] The simplest way is to buy put options or sell call options and earn the premium. When the gains were brought onto the banks' balance sheets, they had to appear as some form of increase in their assets. In fact, the "other asset" item on the aggregated all-bank balance sheet was used to book derivative transactions. Figure 16.1 shows an account on the aggregate bank balance sheet that is classified only as "other assets." This account is normally not of much interest. However, it started to balloon in mid-1997. Whatever the banks did, it helped them expand this account by 125 percent YoY at the peak. While all other bank assets were shrinking or at a standstill, the expansion of this account single-handedly boosted aggregate bank assets by around 5 percent YoY—hardly an indication of a credit crunch. Between November 1996 and November 1998, somehow the banks had ¥33 trillion yen more in their pockets. This game was replayed in 2000 and 2001, on a somewhat smaller scale. As a result, several of the large banks had accumulated enough money to address the bad debts from the bubble era.

Figure 16.1 **Japanese Banks' "Other Assets"**



Source: Bank of Japan

The Primary Bad Debts have been Written Off

Many observers worry, however, that the bad debt problem may be even larger than expected. To the contrary, I would argue that the bad debts that were due to the bubble—that is, the "true" bad debts due to unproductive lending of the 1980s— have already been written off.

The problem with estimating bad debts is that their size depends on the state of the economy. And that depends on the state of the banks. This means that in boom times bank balance sheets look very strong and are improving further, while in bad times they look weak and seem to deteriorate. It is therefore necessary to distinguish between merely cyclical or secondary bad debts (i.e., those that would not have come about if the economy had not turned down, and a large part of which will be recoverable when it does turn up) and primary bad debts. The latter result from credit creation used for speculative and nonproductive investment. The bulk of these primary bad debts derive from the bank loans to real estate, construction, and nonbank financial institutions between the end of 1985 and the end of 1993, extended under instructions by the Bank of Japan. Adding up the loans to these three "bubble sectors," we obtain a bubble sector loan total of ¥58.4 trillion in 1986. By 1993, this had risen to ¥131.9 trillion.

Subtracting the banks' bubble loan books in 1985 from those in 1993, we obtain a top-down estimate of nonproductive credit creation, amounting to approximately ¥74 trillion. Of course, some loans extended to other sectors

of the economy were also used for speculative purposes. But equally, not all of the loans extended to the three bubble sectors were nonproductive; some included funding for viable projects as well. To be on the safe side, we add another 15 percent and thus obtain an estimate of total primary bad debts of ¥85 trillion.[11]

Banks brought at least ¥33 trillion through derivatives and other methods onto their balance sheets, and they received around ¥10 trillion in public and third-party money in February 1999. In addition, banks had already undertaken a cumulative total of around ¥22 trillion in declared write-offs in the period from 1993 to September 1996.[12] This means that around ¥65 trillion of the bad debt total of ¥85 trillion was already accounted for by mid-1999. By 2002, this figure had risen to ¥80 trillion.[13] Thus, we must conclude that the bubble-era primary bad debts had been virtually completely written off by late 2002.

Yet, investors and commentators continued to be worried about far larger estimates of bad debts in the banking system. All remaining bad debts are secondary bad debts that resulted from the deflationary and contractionary policies pursued by the Bank of Japan during the 1990s. Their size is therefore open-ended: if those policies were to continue, the banks could not write off bad debts as fast as they are newly created due to the shrinking economy. The very activity of foreclosing and writing off bad debts indeed reduces demand and thus creates new bad debts.

The Bank of Japan Plan to Increase Bankruptcies

Instead of switching its policies to demand stimulation, in September 2002 the Bank of Japan strengthened its efforts to worsen bank balance sheets and force banks to foreclose on their borrowers. Until then, Hakuo Yanagisawa, Minister for Financial Services, had resisted the Bank of Japan-inspired proposal to inject tax money into banks, effectively nationalizing them, taking over their management and using this power to pull loans from companies, thus triggering many bankruptcies of large firms. Mr. Yanagisawa argued that this plan did not make sense, because the remaining bad debts did not derive from the bubble of the 1980s, but the recession of the 1990s. That recession was due to the Bank of Japan's policies, he argued, and hence antideflation and demand-stimulation policies were called for, not further bankruptcies and more deflation. So Mr. Yanagisawa resisted the Bank of Japan's plans.

He paid for it with his job: in September 2002, the central bank surprised the world with its announcement that it would be prepared to purchase stocks from banks—ostensibly in order to help them. However, as became quickly clear, this announcement was aimed at embarrassing Mr. Yanagisawa, by giving the impression that the bad debt problem in the banking system had

reached dramatic proportions and he was obstructing the necessary policies. Mr. Yanagisawa was duely sacked by the prime minister and replaced with Heizo Takenaka, already minister for economic and fiscal policy. Takenaka is a supporter of the Bank of Japan's plan to increase foreclosures of borrowers and immediately appointed a task force to oversee the banking policies, which included two former Bank of Japan staff. One of them, Takeshi Kimura, immediately demanded that accounting changes be implemented which would *worsen* bank balance sheets and render nationalization unavoidable.[14]

That the Takenaka plan is strongly supported by the Bank of Japan elite was made explicit by the chairman of the Fujitsu Research Institute and former deputy governor of the Bank of Japan, Toshihiko Fukui. He argued in the Japanese media that the government should inject taxpayers' money into banks and force "bank management to take responsibility for their institutions' financial mess."[15] We notice that this proposal creates moral hazard (taxpayers did not create the problem), is economically inefficient (there is a zero-cost way of addressing it), and exacerbates the root problem by reducing demand. Takuro Morinaga, a well-known economist in Tokyo, argued forcefully that the Bank of Japan-inspired proposal by Takenaka would not have many indigenous beneficiaries, but instead would mainly benefit U.S. "vulture" funds specializing in purchasing distressed assets just before central banks switch their policies toward reflation.[16] These vulture funds had faced the difficulty that despite almost 200,000 bankruptcies during the 1990s, few firms sufficiently large for the "vulture" funds to be interested were bankrupted. In this context it may be of interest that when Fukui's and Kimura's support for the bankruptcy plan was voiced, the former was adviser of the Wall Street investment firm Goldman Sachs (operator of "vulture" funds) and the latter operated a private company that advises on securitization (also of distressed assets). Economist Morinaga thus suggested that as soon as sufficient transfers of distressed assets have taken place, an inflation target will be proclaimed and a recovery may be engineered.[17] This seems like an exaggeration—certainly if one is not familiar with events in Asia, which we will consider in the following chapter.

Recovery: Another Miracle in the Making

We saw that in May 2001, later than its March 2001 official announcement of "quantitative easing," the Bank of Japan once again boosted its credit creation significantly. In a policy rivaling its record reflation of 1998, the Bank of Japan had once again decided to stimulate the economy. Given the normal time lag, this meant that by late 2002, industrial production, as well as domestic consumption, and hence real GDP, staged a recovery that surprised most observers.

Whether this recovery will remain temporary is solely in the hands of those who decide about credit creation. It is important to realize that Japan's economy has been held back for a decade by a lack of money circulating in the economy, not complex structural problems. Thus, when the princes decide to give the go-ahead and increase credit creation, Japan's economy will be able to enjoy a rapid recovery, similar to the ones seen in 1999 and 1996. Thanks to the output gap, about 4 percent noninflationary growth is now possible for several years. For an advanced industrialized country, this borders on a second "economic miracle." Whether such high potential growth will be realized, however, depends on the whims of the princes at the Bank of Japan.

17 The Asian Crisis and the Central Bankers

The Asian Crisis

Japan was not the only high-performance economy in Asia that in the 1990s found itself in the deepest recession since the Great Depression. In 1997, the currencies of the key Southeast Asian countries could not maintain their fixed exchange rates with the U.S. dollar. They collapsed by between 60 and 80 percent within the year. This boosted the value of their large foreign liabilities. Unable to pay their debt and facing the possibility of national default, Thailand, Korea, and Indonesia asked the IMF for emergency funding. The IMF stepped in, but only in exchange for a set of stringent policies. Instead of improving, the economies of Thailand, Korea, and Indonesia deteriorated throughout 1998. The banking sectors verged on total default. Economic growth contracted. In Thailand, the country where the crisis started, manufacturing production fell by the largest amount in more than forty years. Stock markets collapsed.

Crisis Due to Economic Structure?

What had happened? Alan Greenspan, the chairman of the U.S. central bank, as well as Robert Rubin, then U.S. Treasury secretary, led a chorus of commentators who asserted that the Asian crisis was the result of the Asian economic system, which was based on closed markets and government interference.[1] Although commentators from Europe and the United States had in preceding years praised the virtues of Asian-style capitalism, they were now virtually unanimous in their belief that the Asian crisis was due to the informal links between governments and big business (now called "cronyism"), the large reliance on bank lending instead of stock market finance (now referred to as "bloated banking systems" and "debt mountains"), and the many forms of government intervention in the markets (now called "government meddling").

It was not surprising that observers trained in the tenets of a particular branch of neoclassical economics should come to this conclusion. As we have seen, this approach to economics axiomatically assumes that only free market economies can be successful. Asia, just like Japan and Germany, had achieved high growth under conditions where the influence of individual shareholders was restricted, managers were given a freer hand, credit allocation policies guided the financial sector, and government intervention was pervasive. As in Japan, the roots of the Asian system could be found in the dark days of the Second World War, when governments reorganized their economies for maximum resource mobilization following the German blueprint. Highly successful, the Asian miracle had been the biggest thorn in the flesh for mainstream economists. No wonder, then, that proponents of mainstream economics were relieved to find that such a system was, finally, underperforming. Since the IMF also subscribes to the neoclassical approach, its officials were quick to claim that the crisis was the result of the Asian system. Based on this assertion, the IMF then made any provision of loans to Thailand, Indonesia, and Korea conditional upon a historic transformation of their economic structures.[2]

But the crisis years, even though they were prolonged over a decade in Japan, were still the exception. There can be no doubt that the Japanese-style mobilized economy not only worked extremely well for Japan, but in various modified forms also contributed to the "miracle economies" all over Asia. Until 1997, the macro-economic performance of Thailand, Korea, Indonesia, Malaysia, Singapore, and Taiwan was widely praised by commentators, academics, and policymakers alike. Economic growth of the first three countries averaged in the double digits for most of the 1970s, the 1980s, and the first half of the 1990s. Per capita income grew 5.5 percent on average from 1960 to 1990.[3]

While there were periods when other developing countries also grew fast, no others have managed to sustain such high growth rates as these for three decades. But the achievements of these economies did not end with such impressive growth rates. They also attained remarkably low levels of income inequality and have been unusually successful in reducing poverty. Moreover, life expectancy improved by more than in any other region.[4]

It is therefore relevant to find out whether the Asian crisis really was the result of the Asian system. A thorough study of its causes reveals that, quite to the contrary, it was the policies "recommended" by the U.S. Treasury, the IMF, and the local Asian central banks that resulted in the Asian crisis.[5] While the Asian central banks previously had had no independence and few legal powers, after the Asian crisis almost all of them had become independent and unaccountable for their actions.

Cause of the Asian Crisis

In Thailand, the country where the Asian crisis erupted first, the causes go as far back as 1993. In that year, Thailand implemented a policy of aggressive deregulation of the capital account and the establishment of the Bangkok International Banking Facility (BIBF). This banking facility enabled the corporate and banking sector to borrow liberally from abroad—the first time in the postwar era that Thai borrowers could do so. In the words of an expert observer: "This plan [implementation of the BIBF] was initiated in 1990 by the Bank of Thailand [Thailand's central bank], which, in view of the successful financial liberalization carried out so far, felt that Thailand was ready and the timing and opportunity were right."[6] Korea and Indonesia adopted similar policies around the same time— again, postwar firsts.

There is no doubt that, as with Japan's liberalization of capital flows in December 1980, this marked a major departure from the old economic structure. What is less clear is just why such liberalization of capital flows was adopted. There was no need for Thailand to borrow money from abroad: It boasted a high savings rate, had sufficient foreign exchange reserves, and possessed a large and vibrant banking sector and a central bank. All the money necessary for domestic investments could be created at home.

Indeed, the pressure to liberalize capital flows came from outside Thailand. Since the early 1990s, the IMF, GATT (predecessor of the WTO), and U.S. Treasury had been lobbying Thailand, as well as other Southeast Asian nations, to allow domestic firms to borrow from abroad. Such liberalization of capital flows had been the key U.S. demand in almost all APEC summits since 1993.[7] The U.S. argument in favor of liberalization was that borrowing from abroad would enable Thailand, Korea, Indonesia, and their neighbors to run balance-of-payments deficits, which could be funded by capital inflows. Moreover, the IMF and the U.S. Treasury argued that neoclassical economics had proven that free capital markets and free capital movement increased economic growth.

These arguments, emerging from Washington, were not convincing to some developing countries that had for decades studied the options available to them. India, most notably, had consistently refused to deregulate the capital account and again in the 1990s resisted U.S. pressures.[8] The Indians had good reasons: The experience of the 1970s and 1980s in almost all Latin American countries had proved that the liberalization of capital flows might result in an excessive buildup of foreign debt. That was not only expensive, as the foreign debt had to be serviced and hence valuable domestic resources would constantly flow out of the country as interest payments, but also dangerous. The Old Testament advises that the borrower is servant to the lender. By becoming indebted, developing countries became more dependent on the

lender countries. And the lenders could quickly withdraw their funds at any time if they so wished. If the loans could not be paid, the collateral could be called in, such as equity in indigenous industries. This was the experience of many Latin American countries that implemented the liberalization and deregulation policies that the IMF and the U.S. Treasury had recommended to them before their crises of the 1970s and 1980s.[9]

Most of all, it did not make much economic sense for a country to borrow significant amounts from abroad in order to fund investments at home. History shows that successful economic powers, such as Germany or Japan, developed their economies with little foreign borrowing. As long as a country has an indigenous banking system, it can create all the necessary money through its banks or central bank, without the need to become dependent on the whims of foreign interests.

Central Bank Policies

There was also a domestic force in favor of capital account liberalization: the central banks of Thailand, Korea, and Indonesia, and the economists of their research departments. They argued that such liberalization would improve resource allocation. This line of argument was picked up by neoclassical economists at home and abroad, who already knew this to be true. While India resisted the pressures from the U.S. Treasury and Wall Street, on one hand, and central banks and neoclassical economists, on the other, the leaders of Thailand, Korea, and Indonesia eventually gave in. By 1993, they had all deregulated their international capital flows.

By doing so, they had committed the first of a series of crucial policy mistakes that would throw their countries into the biggest disaster in the postwar era. The next policy step toward financial meltdown was again taken by the central banks. They set about creating irresistible incentives for domestic firms to borrow from abroad. The impact of the BIBF was foreseeable, with one expert writing as early as 1995, "Large corporations will seek to obtain more funds through the BIBF," hence from abroad.[10]

The central banks in Thailand, Korea, and Indonesia emphasized in all their public statements that they would, at all costs, maintain fixed exchange rates with the U.S. dollar. On the other hand, they raised domestic interest rates above U.S. dollar interest rates. Since the capital account had been deregulated, this meant that rational domestic investors were now given maximum incentive to borrow from abroad. Who would want to take out more expensive domestic loans if foreign loans were cheaper and the central bank guaranteed that there was no exchange rate risk? Hence billions of dollars were borrowed on a short-term basis from abroad by these countries in the years between 1993 and 1997. Net private capital inflows into Asia surged

from U.S. $54.3 billion in 1993 (sharply up from U.S. $20.9 billion in 1992) to U.S. $98.3 billion in 1996.[11]

The pattern of consistent policy "mistakes" by the central banks continued. For decades, the central banks of Thailand, Korea, and Indonesia had been using their own version of window guidance credit controls (in Korea, they were known by the same name; in Thailand they were called the "credit planning scheme"). From 1993 onward, these central banks then implemented policies not dissimilar to those of the Bank of Japan in the 1980s—they raised the loan growth quotas that they were allocating to the commercial banks. Banks were ordered to increase lending. They were faced with less loan demand from the productive sectors of the economy, because these firms had been given incentives to borrow from abroad instead. But the banks had to meet their increased lending quotas. They therefore had to resort to increasing their lending for speculative purposes. Lending to the real estate sector and nonbank financial institutions soared. The rest is history. This excess credit creation did not primarily lead to more consumer price inflation. Since the money was used for transactions to purchase assets, it had to result in asset inflation. Land and stock prices soared.

Policy Mix to Create a Crisis

If the aim of the central banks had been to create a financial crisis, complete with currency collapse and economic recession, the combination of their policies could not have been more suitable. The economic outcome was predictable, inevitable, and should not have surprised anyone, least of all the central banks. Since the domestic economy boomed due to the credit bubble, imports were bloated. Moreover, the fixed exchange rate with the U.S. dollar was maintained at greatly overvalued levels, especially since the 80 percent weakening of the yen between 1995 and 1997. As a result, the exports of the Asian countries dropped sharply. With exports falling and imports rising, the trade balance plunged into a large deficit. But thanks to the substantial foreign borrowing of the corporate sector, capital inflows were so large that they plugged the hole in the trade balance. This ensured that the otherwise unsustainable economic boom and trade deficit could continue for several years.

The danger was that the capital inflows were of a short-term nature and could be withdrawn at short notice. What happened next was the inevitable result of the explosive policy mix adopted by the East Asian central banks. Foreign investors began to worry that this unsustainable situation was about to give way to a crisis. The question had become not whether the Asian currencies would collapse, but when. Investors who could forecast the timing of the collapse of the dollar pegs would make fortunes. The hedge funds, quite familiar with the games played by central banks and the IMF from de-

cades of experience in Latin America, watched the ratio of foreign exchange reserves to short-term foreign-currency-denominated loans. Once the loans from overseas had reached a multiple of the foreign exchange reserves, one had to bet on a devaluation of the respective currency. To defend their currency pegs, the central banks had to use up precious foreign exchange reserves. As other investors became worried and pulled out their short-term foreign lending, more foreign exchange reserves would leave the country. Eventually, the outflow would turn into a flight of capital. The stampede for the door by foreign lenders would quickly exhaust all foreign exchange reserves, if central banks continued to insist on maintaing the dollar pegs. And once the foreign reserves had disappeared, the currencies would have to be devalued anyway. That was the bet of the speculators, who could then make hundreds of millions of dollars in profits.

More Central Bank Mistakes

When speculators began to sell the Thai baht, the Korean won, and the Indonesian rupiah, the respective central bank in each country failed to implement the right policy response. That would have been to immediately abandon the overvalued exchange rate and devalue. Any attempt to defend the peg would merely waste valuable foreign exchange reserves and thus make matters worse. The central banks knew that if the countries ran out of foreign exchange reserves, they would have to call in the IMF to avoid default. And once the IMF came in, the central banks knew what this Washington-based institution would demand—for its demands in such cases have been the same for the previous three decades.[12] In each case, one of the biggest winners in the domestic economy would be the central bank, which would be made independent.

Instead of devaluing, the Bank of Thailand, the Bank of Korea, and the Bank of Indonesia responded with futile attempts to maintain the peg until they had squandered virtually all of their foreign exchange reserves. Especially in the case of Thailand and Korea, these had been substantial when the crisis broke. But with all the foreign exchange reserves lost, these countries did not have enough short-term funds to cover their balance-of-payments deficit. Moreover, the delay of the devaluation gave the foreign lenders ample opportunity to withdraw their money at the overvalued exchange rate. Faced with default, the central banks of the three crisis-stricken countries advised their governments to ask the IMF for help.

The Quick Solution to the Crisis

What type of policies should the IMF have advocated in order to end the crises quickly and maintain stable growth? The most important domestic aspect of

the crisis was identical to the Japanese recession. In their attempts to defend their currencies, central banks raised their interest rates sharply. This pricked the credit bubbles, and it was clear that a credit crunch would follow if the right policies were not taken. So the policy prescription that the IMF should have recommended was a reduction in interest rates and, more importantly, an expansion of credit creation by the central bank and the banks. In order to stabilize the foreign exchange rate, controls on short-term capital movements should have been reintroduced. Finally, the central bank could have purchased all bad debts at face value. With these simple policies implemented swiftly, the crisis could have been ended within about six months and a credit crunch recession avoided. Indeed, it is similar such policies that Malaysia—which refused to hand over control to the IMF— pursued.

Thailand's leaders initially also had comparable ideas, it seems. Soon after the baht crisis broke in Bangkok in May 1997, the Thai finance minister and the prime minister felt that they should simply borrow some more money to bridge the temporary balance-of-payments crisis and implement a bailout program. Who would lend to them without too much ado? The biggest foreign investor in Thailand was Japan. And Japanese companies, Japanese banks, and even the Japanese government had a vital interest in quickly ending the crisis and preventing it from widening. Hence on July 16, the Thai finance minister, Thanong Bidaya, took a plane to Tokyo. He met the most senior government and Finance Ministry figures and held urgent discussions. All Thailand needed was around U.S. $20 billion. Japan at the time had U.S. $213 billion in foreign exchange reserves—more than the total resources of the IMF.[13] Clearly, Asia did not need the IMF. Japan could just as easily have done the job. And Japan was willing. Politically, Japan had found it hard to play a more active role in Asia in the postwar era, and now that its Asian neighbors were in deep trouble Japan had a chance to prove that it was a reliable neighbor willing to help out.

Washington Stopped Japan

In response to Thailand's request, the Japanese government began to talk of an Asian crisis fund. The vice minister of finance at the time, Eisuke Sakakibara, went as far as proposing that an Asian Monetary Fund should be established, so that there would be no need to get the IMF involved. In theory, Washington should have been delighted, as for years it had criticized Japan heavily for not playing a political role commensurate with its large economic weight. Now Japan was even offering to bail out Asia single-handedly, thus saving the IMF and its main contributor and shareholder, the United States, a lot of money. Moreover, there could have been little doubt that Tokyo would have adopted appropriate policies to quickly end the emerging crisis. Japan

has long experience with capital controls and has used them successfully and fruitfully when they were necessary. Japan would have allowed the Asian economies to reflate and bail out their banking systems without closing them down. That would have prevented a full-blown credit crunch and likely avoided any recession.

But Washington stopped Japan's initiative. It unambiguously let Tokyo know that it was not allowed to rescue its Asian neighbors. Any solution to the emerging Asian crisis had to come from Washington via the IMF. Japan thought it could convince Washington otherwise, but failed. It was forced to withdraw its proposals. The same fate awaited Taiwan, which was also not permitted by the United States to help out its Asian neighbors through loans.

The Screws Tighten

As a result, the leaders of Thailand (and later Korea and Indonesia) felt that they had no choice but to follow the advice of their central banks and invite the IMF. The "help" of the IMF was indeed swift. But it took quite a different form from what was necessary for a recovery, and also from what a Tokyo initiative would have offered. In exchange for supplying enough short-term funds to avoid insolvency, the IMF demanded a string of policies, including sharp rises in interest rates, curbs on central bank and bank credit creation, and deep structural reforms encompassing major legal changes. These policies were "performance criteria" that were nonnegotiable.[14]

The structural reforms increased deflationary pressure. The forced reduction in credit creation reduced demand further. The excess credit creation of the previous years thus turned into nonperforming loans. Burdened with large amounts of bad debts, the banking systems of Thailand, Korea, and Indonesia were virtually bankrupt. As credit creation fell, domestic demand shrank. Even otherwise healthy firms started to suffer from the widening credit crunch. As this forced firms to reduce capital expenditures, lay off staff, or close down altogether, unemployment rose, disposable incomes shrank, and the propensity to consume fell. The slump in domestic demand hurt the corporate sector further and raised the number of bankruptcies and loan defaults. As bad debts rose, the banks would lend even less. In this situation, attempts to stimulate the economy via interest rate reductions had to fail. Despite a declining price of borrowing, the quantity of credit creation dropped. Industrial production and output collapsed. Corporate bankruptcies soared. Unemployment rose to the highest levels recorded in the Asian countries since the 1930s.

What Were the Aims of the IMF?

The story seems familiar. Since the IMF's own internal macroeconomic model uses credit creation as the key variable, there can be no doubt that the IMF

knew well what the consequences of its policies would be.[15] In the Korean case, the IMF even had detailed but undisclosed studies prepared that had calculated just how many Korean companies would go bankrupt if interest rates were to rise by five percentage points. The number was substantial. Yet the IMF's first agreement with Korea demanded a rise of exactly five percentage points in interest rates.[16]

It almost seemed that the main interest of the IMF was not in the creation of quick recoveries. The two key demands that the IMF was adamant to push through involved legal revisions that were to change the nature of the Asian democracies. Arguing that the crisis had been due to the economic structure, not the wrong combination of monetary policies, the IMF demanded that in Thailand, Korea, and Indonesia the laws should be changed so that foreign investors would be allowed to purchase land and to take over banks and key industries. The governments had to obligate themselves not to rescue bust banks but to close them down and sell them off cheaply as distressed assets, often to large U.S. investment banks. In most cases, the IMF-dictated letters of intent explicitly stated that the banks had to be sold to foreign investors, although, economically speaking, there is no rationale why this should be necessary.

The other key demand in the IMF list of conditions was that legal changes were required to make the central banks independent—and de facto unaccountable. Yet there was one place the central banks were closely coordinating their policies with: the IMF itself. Immediately after arrival in the crisis-stricken countries, the IMF teams set up offices inside the central banks of Thailand, Korea, and Indonesia, from where they dictated what amounted to terms of surrender, practically ruling the economy as an unelected government.

Instead of analyzing the real causes of the Asian crisis and learning the lessons—namely, to make central banks more accountable and less independent in their key policy tool, the quantity of credit creation—the IMF ensured that the central banks would be rewarded for their actions.

Studying the personnel policies, it can be found that, exactly as in the case of Japan, key individuals at the central banks who had decided to increase bank credit creation before the crisis, and who had favored the liberalization of capital accounts, the maintenance of the dollar peg, and higher domestic interest rates, were promoted after the crisis and continued to control the central banks.[17] Today, the central banks of Thailand, Korea, and Indonesia are all legally independent. They have not been held accountable in a meaningful sense for their disastrous policies.

Further research is clearly needed on the true motivations of IMF policies and whether there is any causation in the correlation observed by former World Bank chief economist Joseph E. Stiglitz between the policies advanced by the IMF's deputy managing director during the Asian crisis and his sub-

sequent employment at the largest U.S. bank. Stiglitz concluded: "Looking at the IMF *as if* it were pursuing the interest of the [U.S.] financial community provides a way of making sense of what might otherwise seem to be contradictory and intellectually incoherent behaviors."[18]

It is noteworthy that international organizations appear aware of just what provides the main opportunity for increasing foreign ownership in other countries and implementing deep changes in their economic structure. For instance, World Bank staff argue that a "crisis can be a window for structural reform," and it can "be an opportunity to reform the ownership structure in the country."[19] The view that a crisis is "an opportunity" or a "window" suggests that it is, in some respects, to be welcomed.

Calling Off the Crisis

The policies of the Asian central banks closely resembled those taken by Hjalmar Schacht in the 1920s, which made the German banking system dependent on short-term capital inflows from the United States—whose sudden withdrawal was then allowed to bankrupt the banking system and much of the corporate sector, creating mass unemployment. Until early 1998, therefore, it seemed that things went well for the structural reformers. Asia was getting ever more deeply engulfed in the crisis. Then, however, two events occurred that changed the picture. As a result, the recession policies were abandoned, and an expansionary monetary policy was adopted, sanctioned by the IMF.

The first event was the increasing awareness among Asian leaders of what game was being played, and hence an increasingly hostile attitude toward the IMF and the U.S. Treasury. The Malaysian leader, Mohammad Mahathir, early on blamed international capital and foreign interests for the creation of the Asian crisis. He became increasingly critical of the IMF and the policies in Asia, which his government had initially also begun to introduce in Malaysia. But in September 1998, Mahathir imposed controls on short-term capital movements and hence stabilized the exchange rate. Simultaneously, his central bank stepped up credit creation and the government implemented a program to clean up the balance sheets of banks. None of the IMF-style structural or legal changes were implemented. This posed a problem for the IMF: The way the Malaysian economy was managed, there was going to be a significant recovery, while the IMF client countries Thailand, Korea, and Indonesia would continue to be mired in deep and steadily worsening recessions. If that happened, it would become obvious to onlookers that IMF policies were the cause of the Asian recessions and that sensibly administered capital controls would enhance social welfare.

Mahathir's policies could not fail to boost the economy. The exchange rate stabilized, foreign exchange reserves shot up by 33 percent in the first half

year after the introduction of capital controls, and exports grew by double digits in early 1998, exceeding those of Malaysia's Asian neighbors. Most of all, since there was no IMF demanding the closure of banks and the sell-off of their assets, far fewer companies went bankrupt and unemployment stayed at lower levels.[20] As a result of the better economic performance, ironically, foreign investment had actually increased.

Since continued attacks in the world media on his policy decision to curtail capital flows failed to dissuade Mahathir, the IMF had no choice but also to give the signal to end the Asian crisis in Thailand, Korea, and Indonesia. Suddenly, the IMF allowed the central banks in those countries to create credit rapidly. As a result, economies bottomed in late 1998 and began to recover in 1999. Since Korea had most faithfully implemented all IMF demands, it would look best for the IMF if the Korean recovery was also the strongest. Credit creation by the Bank of Korea in mid-1998 shot up by the biggest amount in twenty-five years—quite parallel to the BoJ's reflation. As a result, Korean economic growth expanded sharply in the first quarter of 1999. Industrial production rose by double digits in mid-1999, and GDP growth followed. This policy U-turn was probably possible from the IMF's viewpoint because some changes had already been achieved: the crisis had changed governments in all countries concerned; legal changes had allowed foreign interests to take over many key banks, corporations, and real estate; and the central banks had all received full legal independence.

Cronyism in Wall Street

Later in 1998, another problem developed that further accelerated the reflation policies now pursued by the IMF in Asia: What started as a regional Asian crisis quickly began to engulf the entire world. Investors who had lost money started to pull their investments not just out of Asia, but also out of other emerging markets. On August 17, 1998, Russia defaulted on domestic debt. Next, Brazil teetered on the verge of collapse. By September 1998, several major hedge funds had lost billions of dollars; most notable among them the Connecticut-based long-term capital management (LTCM). This hedge fund accepted as clients only high-net-worth individual investors and institutions. It had accumulated an estimated U.S. $5 billion from them. However, the fund used this money as collateral to borrow even more money from banks. The banks thus created new credit and gave the hedge funds such as LTCM new purchasing power over resources. LTCM leveraged its capital by more than twenty-five times in the year before its collapse, thus borrowing more than U.S. $100 billion from the worlds' banks. However, similar to the Japanese bubble of the 1980s, this purchasing power was not used to invest in the creation of new goods and services. It was invested purely speculatively.

When the Asian crisis had affected world financial markets, LTCM's losses threatened to undermine the banks that had lent to the fund, with the possibility of a systemic banking crisis that would endanger the U.S. financial system and economy.

The reaction of the U.S. Treasury and the U.S. Federal Reserve was indicative of their true attitude toward Asia, where they had consistently insisted that hundreds of banks had to be closed, employees laid off, and the assets sold off cheaply.[21] In Asia, government-organized bailouts to keep ailing financial institutions alive were not allowed. But when a similar crisis happened back home in New York, the very same institutions reacted differently: At the end of September, William McDonough, the chairman of the New York Fed, summoned some of the most powerful men of world finance to the boardroom on the tenth floor of the New York Federal Reserve. The assemblage included the chairmen of J. P. Morgan, Travelers, Merrill Lynch, Goldman Sachs, and Morgan Stanley, together with heads of the top European banks and board members of LTCM. Instead of closing down the hedge fund, the Fed organized a cartel-like bailout for the ailing LTCM by leaning on Wall Street and international banks to contribute funds so that it could roll over its liabilities. A full-blown default was therefore averted. But as a result, the banks' exposure had actually increased.

To the Asians this made it obvious that two different standards had been applied. The Asians had been told by Washington that precisely this type of rolling over of liabilities of ailing financial institutions must not happen, that the institutions must be closed down. Moreover, the criticism of Asian countries as being infested with "cronyism" was seen for the bigotry it was, as LTCM was said to have personnel links to the Fed. The 2001 Enron bankruptcy, followed by other high-profile accounting and fraud scandals, further blurred the distinction between Asian-style and U.S.-style cronyism.[22]

Japan and Asia

Feeling betrayed by America, many Asian leaders thought it was time the Asians got closer together. Indeed, Europe had united already. America is forming a free trade zone reaching from Alaska to Chile. But Asia still may seem to be out in the cold. Until recently it had not been viable as a trade bloc. From Japan to China, Korea to Indonesia, virtually all Asian economies were heavily dependent for their economic growth on exports. Unlike the European Union, the majority of Asian exports are not directed to countries within the region. Asia is heavily dependent on countries outside its regions as export destinations. This dependence on export markets outside Asia has been an important economic, if not political, reason why the formation of an Asian trade area has been slow to develop. For Asia to be able to form an autarkic

bloc and hence reduce the potential risk from inward-looking regions in Europe and America, Asia needed a market able to act as final export destination for its consumer products. That market must be as highly developed and as large as Europe or America. In the Asian region there is only one country that could hope to foot this bill—and that is Japan.

Japan has been intimately involved in the integration and development of Asian economies since the 1930s. However, as other Asian economies have been developing rapidly in the 1980s, the Asian trade area has begun to run into a problem that prevents it from becoming a trade bloc similar to the European Union. That problem was the closed Japanese market. An Asian currency bloc will work only if Japan opens itself more widely to Asian imports—and not only those manufactured by Japanese plants abroad. Only then would an Asian bloc become less dependent on exports to Europe and America.

The third shift of Japanese factories into Asia, and hence the final phase of the creation of an Asian economic zone, has started with the Asian currency devaluations and economic downturns that began in 1997. As Asian currencies fell up to 80 percent against the U.S. dollar, the production bases of Japanese manufacturers in Asia were suddenly far more competitive than could have been hoped. Though factories that produced output for domestic consumption would be affected by the prolonged Asian slump, more than half of Japanese factories abroad have been serving as offshore production bases from which to reexport to other parts of the world, including Japan.

Already, more than half of all automobiles made by Japanese companies, half of all machinery, and a quarter of all manufactured output are produced outside Japan.[23] This almost means the creation of a second Japan beyond the borders of its archipelago, mainly in Asia.

Japan will directly benefit from the fast-paced development of the Chinese economy, exporting not only manufacturing plants but also technology and know-how. Moreover, as China develops, it will offer a prodigious market for anyone ready to capture it—and Japan will be ready to supply both products and services. Japanese systems have the unique opportunity to evolve into the standard for the entire Asian region. The increasing expansion of Japanese industry abroad will be another factor necessitating fundamental changes in the domestic structure, for as manufacturing jobs are exported to Asia and the rest of the world, service and nonmanufacturing jobs will have to be found for the workforce at home.

On the Road to Asian Currency Union

Once central banks had achieved independence from their national governments and parliaments, power to control the entire Asian economic region could now be further consolidated by making formal and public what had

been going on behind the scenes: Central banks had quietly established ties and cooperation, and increasingly talk was heard about the need for currency unification.

The goalposts had moved closer. The immediate outcome of the Asian crisis in 1997 was that the Asian countries abandoned their link to the U.S. dollar. Not only did the dollar link (instead of the overvaluation) receive much of the blame for the crisis, but without any U.S. dollar reserves left, a dollar-based fixed exchange rate was hardly possible. By the time the foreign exchange reserves of most crisis-affected countries had recovered in 1998, the opinion of policymakers had already shifted against a dollar link. Instead, the Asian countries were loosely targeting a trade-weighted basket of international currencies. Since trade with Japan had become more important by the early 1990s than trade with Europe or the United States, this naturally gave a big weight to the Japanese yen. In other words, since 1998, Southeast Asia had de facto already adopted the first stage of a yen-centered currency system.

After the dust of the Asian crisis began to settle in 1999, many meetings and conferences of Asian leaders discussed how Asia should organize its financial markets in the future. Mahathir, keen to counterbalance Washington's influence, had been the first to demand more formal links between Asian countries—a form of Asian economic union. From the Japanese side, the Asian Monetary Fund idea was warmed up again in 1999. The head of the Hong Kong Monetary Authority argued in May 1999 that Asia should move toward currency union. This was endorsed in June 1999 by the president of the Philippines. Meanwhile, think tanks in Tokyo (such as the Asian Development Bank Institute and the Institute for International Monetary Affairs) and Manila (the Asian Development Bank) began to draw up plans for a phased introduction of monetary union, modeled on the process that led to currency union in Europe: first introducing target zones between exchange rates, then gradually moving on to semifixed and finally fixed exchange rates, so that the public could slowly acclimatize to the ultimate goal.

Since 1999, the United States's attitude toward greater Japanese involvement in Asian monetary affairs appears to have changed again, as talk of an Asian monetary fund is no longer criticized. Japan has been actively encouraged to increase the use of the yen abroad. This U-turn in U.S. policy may be because Washington and New York never rejected the idea of Asian currency union. Tokyo was probably only rebuffed with its proposal of an Asian Monetary Fund because it had excluded the United States.

Future historians may well see in the Asian crisis the trigger for the first step toward the creation of an Asian currency union and the introduction of an independent single Asian central bank. Behind the scenes, the princes from Tokyo had not been idle bystanders concerning the developments in Asia. Already in 1991, the eleven central banks of the East Asia and Pa-

cific region formed an exclusive club, called the Executives' Meeting of East Asia-Pacific Central Banks, or EMEAP. Little known to the public and maintaining a low profile, the central bank deputy governors of the entire region have been meeting twice a year. Since a landmark meeting of all the governors hosted by the Bank of Japan in Tokyo on July 19, 1996, cooperation has been tightened further. It now includes annual governor-level meetings, as well as more frequent meetings of several working groups and study groups per year. The Bank of Japan has been functioning as the temporary secretariat of the exclusive club. No minutes of the frequent meetings and discussions are published.

It is surprising that EMEAP could not prevent the Asian crisis despite the fact that the club had forged an agreement concerning cooperation in case of currency crises just a few months before it broke up in 1997. And yet the policies taken by the Asian central banks before, during, and after the crisis were very similar to each other—and indeed similar to the disastrous policies of the Bank of Japan during the 1980s and 1990s.

18 More Power to the Princes

Crowning the Princes as Uncontested Rulers

On May 21, 1997, the Lower House of the Japanese Diet passed the first revision of the new Bank of Japan Law in half a century. It was passed by the Upper House in June and became effective on April 1, 1998. The old law had given the democratically elected government ways and means to influence the central bank, and it had named "support of national policy" as the main policy objective. The new law made the Bank of Japan legally independent, with only minimal reporting requirements to the government and the Ministry of Finance.

The new law says that "the Bank of Japan's independence in formulating and implementing monetary policy shall be respected." Two paragraphs down it says again: "In implementing this law, the Bank's independence in carrying out its operations shall receive sufficient consideration."[1] There are no more government representatives among the members of the new Policy Board. The ultimate threat of dismissal of the governor is gone. As the official report on the change of the BoJ law recommended, "The Officers shall not be dismissed for holding opinions different from that of the government." Article 25 states, "Executives of the BoJ shall not be dismissed against their will during their term of office." Even if Bank of Japan staff are found guilty of misconduct, all the government can do is ask the Bank of Japan itself to "take necessary measures to correct such misconduct." In the new law, "the power of the minister to conduct on-site inspections shall be abolished."[2] Most of all, "the broad authority of the minister of finance to issue directions to the Bank of Japan and appoint its Comptroller shall be abolished."

After half a century of behind-the-scenes battles with the Ministry of Finance and the politicians, the princes had reached their goal: The extensive powers that they had quietly enjoyed throughout the postwar era had now become official and perfectly legal. They had moved up from being backstage manipulators to being the crowned rulers of Japan's economy.

Waking up to Reality

Not long after this momentous law change the politicians woke up to the reality of what they had done. From early 1999 onward, more and more politicians realized that throughout the 1990s, the economy could have been stimulated quite easily by an expansion in central bank credit creation. Throughout 1999, members of the government and the LDP called on the Bank of Japan to increase the credit supply by buying government bonds. Their voices became even louder in early 2001, when the LDP called for "quantitative easing" by the BoJ.

They were too late. Having just been made independent the previous year, the Bank of Japan saw this as the first challenge to its new powers, and vigorously rebuffed the politicians. Governor Hayami and his deputy, Yutaka Yamaguchi, denied that any such "quantitative easing" was possible or would be effective. Throughout 1999, the BoJ failed to increase bond or commercial paper (CP) purchases. Many politicians, not used to a publicly recalcitrant central bank, were infuriated by the cold refusal of the Bank of Japan to budge. But it was too late. The politicians had decided to cut off their right hand by voluntarily giving up control over monetary policy.

The politicians were not the only ones to realize just how powerless they had become. Throughout 1999, and against the expectations of the majority of currency forecasters, the yen strengthened. Worried about the economy and about the employment situation of its citizens, the Ministry of Finance ordered drastic foreign exchange intervention. But, as we saw, in a repeat performance of the events of early 1995, the Bank of Japan sterilized all foreign exchange interventions by selling its bonds to the domestic economy. Just as in 1995, it oversterilized. Instead of creating credit, the central bank was tightening it at the fastest rate yet seen in the postwar era. This strengthened the yen back to ¥100/$ by the end of 1999.

Those Ministry of Finance officials and politicians who went back to study the new Bank of Japan Law could find nothing to fault the central bank on, for the only explicit policy goal that the law prescribed was "price stability." Since there was no inflation, the central bank and its decision makers argued, they were fulfilling their duty.

The lobbying by leading Bank of Japan staff of Diet politicians in 1996 and 1997 had paid off. At the time, BoJ insiders such as Yutaka Yamaguchi (later deputy governor) and Toshihiko Fukui had spearheaded the campaign that blamed all of Japan's economic ills on the Ministry of Finance. The grounds for this argument had already been laid by Mieno, who had devoted much of his public life after his 1994 retirement to lobbying in numerous speeches and meetings for a change in the Bank of Japan Law. Given his reputation as the Robin Hood who had pricked the bubble to help poor people, many listened to what this selfless man had to say.

Sovereignty for the Princes

There was another reason why the politicians felt the case for an independent central bank was sound. To implement changes in Japan, it is always helpful to be able to refer to the experience of other countries that had already made the change. Then it could be argued that Japan had to follow the international trend. Japanese politicians had been trained in the postwar era to pay attention to the trends set by the "international community." So Bank of Japan officials helpfully pointed out that parliaments in many of the advanced industrialized countries had already made their central banks independent.

The most forceful case in favor of central bank independence was made in the Maastricht Treaty of 1992, which laid the foundations for monetary union in Europe. The treaty described the role and function of the European Central Bank (ECB), which started operations as scheduled, on January 1, 1999, and which is legally the most independent central bank in the world. According to the treaty, the ECB was going to be totally independent from and unaccountable to any government and any democratically elected assembly.

The Maastricht Treaty quickly became the new goal to aspire to among central bankers all over the world. Bank of Japan staff specifically referred to it as the prime example of a "modern" central bank law that enshrined central bank independence from democratic control and only set the task of ensuring price stability.[3] Proponents of the Maastricht Treaty based their case on the experience of the German central bank, the Bundesbank. Since that treaty was new, and most central banks in other countries had only recently become independent, proponents of Bank of Japan independence ultimately also referred to the case of Germany, where central bank independence had the longest history. Based on frequent reference to the experience of the Bundesbank, Bank of Japan staff created the impression that the proposed new Bank of Japan Law was within internationally accepted best practice, and Japan merely had to follow the "global standard."

The German Experience

The experience of the Bundesbank remains such a focal point of discussions about central bank independence that it deserves much closer scrutiny (which is the purpose of the next chapter). It is well known that the German central bank, then called the Reichsbank, created too much money in 1922 and 1923, and hence caused hyperinflation. It is normally thought that this is why the postwar German constitution made the Bundesbank largely (though not completely) independent from the government. And indeed, the Bundesbank's track record is very good. It is this experience that probably convinced most parliamentarians in Japan, as well as other countries, that it was the right thing to make the central bank independent.

Yet the German case may not be representative. The chain of logic that led to an independent Bundesbank was as follows: The authors of the German constitution looked back at German monetary policy and determined the biggest policy mistakes. No doubt that was the hyperinflation of the early 1920s. They then set out to ascertain its cause, concluding it was the legal status of the central bank that was the problem. Hence the Bundesbank's status was determined.

Mieno and his fellow officers at the Bank of Japan boiled this down to the formula that the Bundesbank's success was due to its very strong legal independence. They then urged politicians to adopt these conclusions without proper reflection on the true status of the Bundesbank and the chain of thinking that had led the Germans to their conclusions. It was akin to copying steep roofs for houses from Germany and introducing them in Tokyo without realizing that the steep roofs were made for areas with heavy snowfall. If Japan was to truly learn from the German experience, it would, like Germany, have to look back at past monetary policy, determine the biggest policy mistake, find its cause, and then implement a law that prevents any recurrence of that problem.

Doing this for Germany, we get quite a different story from the above. As we will see in the next chapter, it turns out that the monetary policy mistakes of the 1920s and early 1930s were made by a Reichsbank that was totally independent and unaccountable to the German government or parliament. This is why, contrary to popular belief, the Bundesbank was made *less* independent and *more* accountable than the Reichsbank.

If It Ain't Broke, Don't Fix It: Japan's Inflation Record

Furthermore, by referring to the German experience, Bank of Japan staff insinuate that inflation is the biggest problem of monetary policy. While this may have been the case in Germany, in Japan inflation has not been the problem. Compared to virtually any other country, postwar Japan has enjoyed one of the lowest inflation rates. In the twenty years from 1976 to 1996, consumer prices rose by an average of just 2.9 percent per year. In the decade from 1986 to 1996, they rose only 1.2 percent. This is significantly lower than the inflation in the United States, which averaged 5.3 percent in the twenty-year period and 3.5 percent in the ten-year period. Many people are surprised to find that Japan's inflation has been lower even than Germany's, the reputed model for low inflation. German inflation averaged 3.1 percent over the twenty years from 1976 to 1996 and 2.4 percent over the decade from 1986 to 1996. The latter figure is exactly twice as high as the Japanese inflation rate over that decade.[4]

Japan's inflation record is impeccable. It would make the Bundesbank jealous. Since nobody criticized the Bundesbank's inflation record or suggested

that it needed another legal change to make it even more powerful, why did the Japanese parliament change the Bank of Japan Law?

Japan's Problem: Dramatic Boom-Bust Cycles

While inflation has not been Japan's biggest monetary policy problem, this is not to say that monetary policy has been without serious flaws. We have seen that the biggest problem of Japanese monetary policy has been the creation of boom-and- bust economic cycles. This started with the stop-and-go growth pattern and the asset deflation crisis of the 1960s. Then there was a huge speculative boom in the early 1970s, which ended in a deep recession in 1974 and the following years. Growth then accelerated in the late 1970s, only to slump again in the early 1980s. In the second half of the 1980s, the biggest economic bubble on record was created in Japan. This was followed by a decade of recession and record high unemployment. Parallel with these momentous swings in economic growth, the economy has also suffered from extreme gyrations of the exchange rate, such as the swing of the yen to ¥79.75/$ in April 1995, after which it collapsed by 80 percent to hit ¥147/$ in mid-1998.

In this book we have seen that the rate of economic growth, asset price movements, and exchange rates have been largely determined by the Bank of Japan.[5] Using its extralegal window guidance credit controls, in the 1980s the central bank forced the banks to lend excessively to real estate speculators. In the 1990s it restricted credit and burst the bubble. It then failed to increase credit creation and actively disrupted government policies to stimulate the economy. In addition to prolonging the recession, the Bank of Japan at key junctures manipulated the exchange rate to strengthen the yen. The considerable national debt resulting from these blows to the economy has also been the responsibility of the Bank of Japan.

The Cause: Too Much Independence

Did the Bank of Japan undertake these disastrous policies because it lacked independence from the government or the Ministry of Finance? There is no disagreement about the consensus view that the Bank of Japan was not fully in charge of interest rate policies. However, we have found that it was not interest rates that were responsible for these costly gyrations in economic activity. Instead, they were driven by the quantity of credit creation. There has been no evidence that the Ministry of Finance, the government, or other agencies had any influence over the Bank of Japan's quantity of credit policies. To the contrary, we found that a small number of insiders at the Bank of Japan independently determined these policies without being held accountable for their actions. Instead of being demoted for their policies, the creators of the bubble, Mieno and Fukui, were promoted to governor and deputy governor,

respectively. Fukui was still vying for the top job in 2002 (though his chances have been damaged by increasing public awareness of his role in the creation of the bubble). Thus the Bank of Japan's biggest problem has been not lack of independence, but rather excessive independence and lack of accountability in terms of the key monetary policy tool, the quantity of credit.

The Power of the Princes

The lesson from German and Japanese history is that instead of increasing its independence, the power and independence of the Bank of Japan should have been reduced. As politicians have found out, there is little they can now do to influence the central bank. All the Bank of Japan is required to do in exchange for its far-reaching powers is to "establish relevant procedures to prepare a report every six months, stating the Policy Board's monetary policy decisions and the status of its implementation." Moreover, "the Bank shall endeavor to publicly disclose the contents of its decisions, and decision-making process, regarding monetary policies." In other words, the central bank merely needs to report on a few topics of its choice. Neither the Diet, the government, nor the Ministry of Finance, not to mention ordinary citizens, can do anything to change its monetary policy. The only policy objective in the new law is "price stability." In the name of trying to achieve "price stability," the central bank can do what it wants, and nobody can interfere, short of scrapping the new law.

The increased "disclosure" of its decision-making process remains a farce. Short summaries of the Policy Board meetings are now published on the Internet after a time lag. But from studying these, it is clear that the crucial decisions are not even discussed by the Policy Board. Every month, the Bank of Japan decides how much credit it will create. This decision affects economic growth, asset prices, and (quite immediately) the exchange rate. Yet in the years since publication of Policy Board minutes, this decision has never been discussed explicitly by the Policy Board, which is preoccupied with discussions about interest rate policy, the BoJ's longstanding smoke screen, or banks' reserves, the more recent decoy.[6] From this it follows that the board, staffed with Bank of Japan insiders and largely malleable outsiders, is still not the location of real decision-making power—as it has never been in the postwar history of the Bank of Japan.

Information Management

Without outside checks on their actions, central banks are unlikely to divulge much about their actual policies to the public. To the contrary, their emphasis on interest rates in public discussions has served as disinformation. In Japan, an important tool for the propagation of misleading descriptions of the Bank

of Japan's policy is the central bank's Institute for Monetary and Economic Studies. This institute is not involved in briefing actual decision makers at the Bank of Japan about economic conditions. Instead, it produces academic studies and invites foreign and domestic academics on well-paid research projects and conferences. Milton Friedman, for many years one of the academics invited by central banks, concluded that in the case of the U.S. Federal Reserve, there was no sincere interest in scholarly activity of the type that searches for the truth and attempts to draw suitable lessons from it. Instead, he found that economic research and exchanges with academic scholars were mere "window dressing," employed to support or cover up the central bank's actual policies.[7]

Another respected researcher of central bank policies, Oxford University's James Forder, concluded upon close scrutiny of the activities of the European Central Bank's publications that they are merely self-serving.[8] Already in the early 1970s, researchers had argued that central banks could be expected to argue that "monetary policy could achieve rather little, and always to offer explanations of events that would diminish their own responsibility for policy failures, while taking credit for successes. Secondly, they could be expected to try to maximize their policy leeway and minimize accountability by "presenting different explanations of the same phenomenon at different times—presumably with the implication that only they knew which explanation was applicable at which time. Then, depending on the explanation offered, different policies could be chosen. A useful component of policy presentation would always be the announcement of a variety of different policy targets or indicators. While giving the appearance of transparency, the central bank's discretion would then be increased by being able to refer to different indicators at different times so as to justify the desired policy."[9] Forder concluded from its publications that "all these things can be seen in the behaviour of the ECB today."

These findings are very much consistent with the activities of the Bank of Japan's Institute for Monetary and Economic Studies. A glance at its research output reveals that it focuses on propagating economic analyses that are hardly relevant for the decision makers. Any issues of real importance, such as the role of the quantity of credit or the decision-making process concerning the quantity of credit, remain out of bounds. The institute never published a serious analysis of the role of window guidance in the creation and propagation of the bubble. Instead, the economists employed by the Bank of Japan produce writings that give the impression that monetary policy is made and can be fully understood by focusing on interest rates. The Bank of Japan's hired economists have even been producing research that suggests that central banks have practically no power. In his publications throughout the 1990s, Kunio Okina, currently the head of the institute, claims that the Bank of Japan

cannot control the quantity of money or credit in the economy. According to Okina, money is always determined by the demand for it, and the problem has been that during the 1990s there has not been enough "demand for money." Instead, lowering interest rates has been a sufficient response of the Bank of Japan during the 1990s.

Okina failed to point out that the world's largest demand for money was indeed located in Japan, where the government desperately demanded money and where the majority of small firms have remained cash-strapped for almost a decade. Yet the Bank of Japan refused to extend any money to them. As Friedman and others have explained in detail, such arguments serve central banks to fend off any criticism of their policies and thus allow them to pursue their own agendas without serious accountability.[10]

It can probably be said that most of the staff at the institute are not even aware that they are being used as a smoke screen by the princes. Many are hired economists who have been shielded from actual experience of the implementation of monetary policy. Instead, they have been sent to the United States to gain Ph.D.s in the type of theoretical economics that sees little role for the existence of money and thus provides an ideal diversion from the important facts of reality.

The production of misleading and one-sided propaganda is not the only way in which central banks attempt to reduce their accountability. Indeed, the scope for the "management" of information by central banks is substantial. Anyone who wants to monitor the policies of a central bank needs to have accurate information. But the data needed to assess the economy and central bank policies are produced by none other than the central bank itself. This creates a conflict of interest. It is exacerbated by the view, sometimes expressed by economists and central bankers, that a central bank *should* be vague about the economy and its policy intentions. The Bank of Japan has been excelling on this count. In April 1998, when it gained legal independence, the Bank of Japan stopped publishing the monthly data for sectoral bank loans, which it has been compiling and using as the basis for its credit allocation since 1942. This series has been at the core of the window guidance credit allocation process. No wonder the Bank of Japan is trying to keep these data under wraps. They are a reminder of the key tool of the princes. Stopping the publication of such data series will make it harder for economists to analyze the economy and to assess BoJ policies.

Ironically, the Bank of Japan's Okina has admitted in his publications that statistics on credit are important and, indeed, have greater information value than other data series (such as M2+CD). However, he regrets that the data series are hardly useful to economists for forecasting, because they are announced too late— by the Bank of Japan.[11] The central bank of course has the data available in real time, yet it has not speeded up their publication.

The time lag between the end of an observation period and the publication of credit statistics remains the two to three months that were needed thirty or forty years ago, despite the fact that information technology has increased efficiency of data processing to the extent that real-time publication has become possible.

Power in the Hands of a Few

A governor of the Bank of Japan once reminded us that "a large part of the daily transactions of households, firms and investors are settled by means of funds transfers and remittances between banks. In turn, banks' balances are settled across their accounts held with the Bank of Japan. In other words, the majority of transactions conducted throughout the country are eventually concentrated and settled at the Bank. As a result, the amount settled across the current accounts at the Bank totals more than ¥300 trillion per day. This means that an amount equivalent to approximately 70 percent of Japan's annual GDP is transferred each day through the accounts at the Bank."[12]

With the end of the Cold War, traditional politicians have lost out to central bankers as the driving force in the world. Central bank decisions can open the floodgates for capital flows to pour into one market and out of another, redenominating prices, quantities, and currencies. As the movement to strengthen the independence of central banks has gained momentum, the discreet individuals in dark suits, who are not known for verbosity, have become the de facto rulers over economies, countries, and regions. They create booms, busts, and crises; they reflate and deflate, appreciate and devalue, affecting the daily lives of millions of people.

Most observers have assumed that the Bank of Japan had wanted to create a recovery in the 1990s. The truth is, it didn't. This finding sheds new light on events that happened in other countries. We normally assume that the U.S. Federal Reserve had wanted to end the Great Depression of the 1930s—a tragedy that led to starvation in the United States and other countries. However, the Fed failed to take the policies that were necessary to create a recovery for almost a decade. Instead of intervening and implementing the policies for which it was created, namely, printing sufficient amounts of money and supporting the banks, the Fed watched as tens of thousands of banks went bankrupt, taking the savings and livelihoods of many ordinary citizens with them. Moreover, as in the 1990s in Japan, the reason for the banking crisis of the 1930s lay in the preceding decade, when the Fed allowed bank credit to rise significantly, especially credit creation used for speculative purposes. Whether we consider the quantitative policies taken by the Swedish central bank in the 1980s and 1990s or the policies of the central banks in the United States, Asian countries, or Japan, the historic fact is that central banks have

been at the center of the boom-and-bust cycles that have plagued the world economy. With such a performance record, has it really been wise to further increase the power of central banks and decrease their accountability?

Accountability and Transparency

To make central banks accountable, clear policy objectives are necessary that go beyond the narrow goal of producing low inflation.[13] Central banks should be required to avoid business cycles and achieve near-full employment. The macro-economic variable that matters to the constituency of central banks is nominal GDP growth, since it determines overall sales, profits, wages and salaries and, together with its gap to potential growth, prices.[14] It therefore does not make sense to require central banks to target anything else. If other variables are chosen as so-called intermediary targets, then there is immediately room for divergencies between this intermediary target and the ultimate goal that matters for most. Central bank bureaucracies could be expected to exploit these in order to reduce accountability and work towards their own interests.

In Japan's case, the Bank of Japan could be given a nominal GDP growth target of 4 percent. If this goal is not met within an error margin of, for instance, 0.3 percentage points, serious and credible sanctions need to be imposed on the actual decision makers (not just the figureheads). The sanctions could include dismissal of its entire senior staff. To make this sanction credible, a "shadow" BoJ could simultaneously be appointed consisting of experts ready to take over. There can be little doubt that under such an incentive structure the central bank would deliver high growth with low inflation. Should the central bankers argue that they cannot meet such targets, then allow the free competition that they so admire find suitable personnel in the labor market that can. Not surprisingly, leading macroeconomists argue for nominal GDP targets for central banks.[15]

It would be better still if the Bank of Japan Law was changed again to make the central bank directly accountable to democratically elected institutions. This is politically not easy, however, since the law was only changed in 1998. But mistakes must be acknowledged and corrected as early as possible.

A public that is aware of the facts is likely to agree that monetary policy should be put back into the hands of democratically elected institutions. This includes ending the monopoly over information that many central banks currently enjoy. The power over collection and dissemination of data relating to banks and credit should be transferred to independent auditing institutions, which are themselves changed at intervals.

In Japan, an independent parliamentary commission should be appointed that closely scrutinizes the past twenty-five years of quantitative policies by the Bank of Japan and brings the responsible individuals to account. It is odd

that dozens of bankers and bureaucrats have been arrested in the aftermath of the collapsing bubble, while those who have been truly responsible for both recession and bubble, and hence the bad debt problems of the banks, have never been called to account. The recession has produced unemployment, social dislocation, and suicides. The princes may not realize, or may not care, but they have been playing with the lives of millions of people. It is time for them to take responsibility.

Japan's economy can easily be set on course for a second economic miracle, thanks to credit creation. But as long as the actions of the princes are outside any democratic checks and balances, the princes can, if they so please, create yet another downturn, as they did in 1997 and 2001.

The Revival of the Reichsbank

In many countries today ... monetary policy making is entrusted to an independent central bank. This reflects the human wisdom that has been nurtured by history.
—*Yasushi Mieno, governor of the Bank of Japan*[1]

The Fed, the European Central Bank and the Bank of Japan together set monetary policy for a zone that accounts for 80 per cent of the world's industrialized economic activity.... Rarely, if ever, can so much power have been wielded by such a small number of institutions sitting outside the direct democratic process.
—*Goldman Sachs economic research*[2]

Greenspan is part of a trend that's been sweeping the globe in recent years: Central bankers are running the world nowadays. An unelected economist, he's been holding America's economic reins.... In Europe, 12 countries have adopted a single currency and effectively forfeited economic sovereignty to the European Central Bank.
—*William Pesek Jr., columnist, Bloomberg News*[3]

Recession—But Nothing We Can Do

Commentators seem to agree that today central bankers are in charge. In his article entitled "When Central Bankers Run the World," Bloomberg financial columnist William Pesek wonders why "there's been minimal backlash against this new world economic order, save the occasional protest at meetings of the World Trade Organisation or IMF." He suggests it is because of "voters and politicians alike finding comfort in knowing that a tested economic policy maker is at the controls."[4] In other words, we are happy with the rule

of the central bankers, because we believe this will ensure lasting economic growth and prosperity. It is a comforting belief.

When the German economy started to slow down visibly in 2001, German politicians, including finance minister Hans Eichel, increasingly felt the need to implement stimulatory policies.[5] However, just like their Japanese colleagues in 1999, they found that there was little they could do. Normally, three types of policy tools are available to governments in order to influence and stimulate an economy: regulatory policy, fiscal policy, and monetary policy. Since Germany, like many countries today, is committed to deregulation, privatization, and liberalization, there was no leeway for new regulatory intervention. Due to fiscal tightening imposed by the European stability and growth pact, stimulatory fiscal policy also had to be ruled out. This leaves us with monetary policy, which is the most powerful policy tool to influence an economy. However, politicians had no power over it. The ECB is independent from any government. Thus the government had been left without any serious macroeconomic policy tool. Even if the Bundesbank, Germany's central bank, felt that it needed to act to stimulate the German economy, there was nothing it could do. Once one of the most powerful central banks in the world, the Bundesbank has been transformed into the Frankfurt branch office of the European Central Bank. The ECB decides German monetary policy, whether German politicians or Bundesbank staff like it or not.

The End of the D-Mark

On January 1, 2002, new paper money and coins were introduced in most of Europe. What still seemed an unlikely scenario to many observers as recently as the mid-1990s happened without major obstacles or upsets: Twelve European countries gave up their national currencies. With the introduction of fixed exchange rates in January 1999, their governments and national central banks had already relinquished all control over monetary policy to the new power center of Europe: the European Central Bank.[6]

Most astonishing to outside observers was the fact that Europe's largest economy, Germany, had given up its deutsche mark. The strong attachment the Germans had developed to their mark during the postwar era had bordered on the religious. Many economists attributed the postwar German economic miracle to the stability of the mark and to the reliability of its guardian, the Bundesbank. With the demise of the deutsche mark, the history of the Bundesbank also came to an end.

British observers called it "a puzzle": "The DM became the key currency of the EMS [European Monetary System] and one of the world's major currencies; by the 1980s it was second to the U.S. dollar in terms of the proportion of world trade that was invoiced in it. That so much was achieved in such a

relatively short time makes the history of the currency remarkable. What is perhaps even more remarkable is its future. That a currency which achieved so much, and which was for that reason so popular with the citizens of the country that used it is to disappear into EMU [European Monetary Union] in 2002 is, at the least, surprising.... One could not but be surprised that a currency at once a cause and a symbol of Germany's recovery should be abandoned in a democracy."[7]

The Primacy of Politics

Economists knew all the while that there was no good economic rationale for abandoning the mark. Many of the economists at the large German banks, for instance, wanted to issue warnings about the costs and dangers to Germany of the introduction of the euro. However, the boards of their banks did not allow them to publish such research. To the contrary, only positive analyses were allowed to be published.[8] There can be little doubt that the reasons for the creation of the euro were not to be found in the realm of economics.[9] Monetary integration had been used as a tool to accelerate the unification of Europe and push toward the establishment of a fully fledged "United States of Europe."[10]

Despite the public information campaigns and the occasional muffling of intellectual opponents of the euro, grassroots resistance to the single currency remained strong in many major European countries, including Germany and France. Opposition is probably still strongest in the United Kingdom, whose population is aware of the inevitable loss of sovereignty and control over its destiny if it gives up its own money. Referenda held in Denmark and Sweden were uncomfortable for politicians, because the population turned out to have a different opinion than they did. Thus they will be asked to vote again and, if necessary, again after that. It would also have been difficult for any referendum in Germany to achieve a majority in favor of the abolition of the mark and the adoption of the euro. That is why no such referendum was ever held. Instead, politicians used taxpayers' money to fund expensive publicity campaigns to make the euro popular.

Power in the Hands of a Few

The area where the euro is used includes a population of about 290 million, with a GDP of more than €7 trillion. This closely rivals the United States, with a population of about 280 million and a GDP of about €8 trillion. The handful of decision makers at the European Central Bank control the amount and ultimately also the allocation of money circulating in the twelve countries in this region.[11] This is no small matter. History has shown that the power to

create and allocate money easily rivals, and usually dominates, military might.

Yet the often dismal performance of politicians has convinced many observers that it may be preferable to hand power over to objective technical experts, such as the central bankers. There are several problems with this argument. First, even technical experts are humans. As such, they are as prone to errors and acts of selfishness as anyone else. What they need is the right incentive structure to limit these tendencies. This means meaningful accountability for their policies.

Second, are central bankers really always objective? In the words of the chair of the economic and monetary committee of the European Parliament, the German Christa Randzio-Plath, "monetary policy is never neutral. It affects growth and employment."[12] That is why, before the establishment of the ECB, Randzio-Plath was pushing for greater transparency and accountability of this institution—in vain, as it turns out.

Especially given Europe's—and Germany's—disastrous experiments with unaccountable and opaque control regimes in the twentieth century, it is astonishing to find that yet another experiment with centralized control is being attempted. How was it possible that such enormous power over such a vast region has been handed to such a small number of people?

For the Sake of Low Inflation

The European Commission, an unelected group whose raison d'être is to build a United States of Europe with all the trappings of a unified state, had an interest in weakening individual governments and the influence of the democratic parliaments of Europe. What better way than creating an independent European Central Bank? What is not so easy to see is why Europe's parliamentarians should have agreed to their own castration, which the creation of central bank independence entailed.

They agreed because they believed that economic theory as well as historical reality had proven this to be the best solution. Just as in Japan's case, the creation of the strongly independent ECB was justified with the argument that this was the "human wisdom nurtured by history," to use Mieno's words—especially the history of the Bundesbank.

Indeed, the German experience with the Bundesbank has been largely positive. But as we see from this book, that is the exception in the relatively short history of central banks. The experience with the Bundesbank's predecessor and with the central banks of other countries has not been as happy. This raises three questions: What made the Bundesbank so successful? Is the same ingredient for success also to be found with the ECB (and the Bank of Japan and other central banks)? What, indeed, is the definition of "successful" monetary policy?

Inflation is usually considered the main policy mistake that central banks or governments can commit. Pundits have boiled the message down to the formula that central bank policy is successful if there is little inflation. Indeed, during much of the postwar era, German inflation has been modest by international comparison. The same commentators usually argue that the main ingredient of the Bundesbank's success of low inflation was its independence. This view has become accepted wisdom, so much so that we hardly ever ask whether there is any real evidence for it.[13] Several influential academic studies have offered such evidence, showing statistically that the degree of independence of a central bank is correlated with lower inflation. The less influence governments can exert over central banks, the more stable the currency, they say.

It turns out that the scientific evidence for central bank independence that was relied upon in the Maastricht Treaty derives from a single study that was commissioned by none other than the European Commission itself—an interested party. Published in 1992 under the name "One Market, One Money," the study purported to demonstrate that central bank independence leads to low inflation.[14]

Phony Findings

How reliable are the findings of this study? A closer look reveals that there is no such scientific evidence. The study arbitrarily selects a number of countries, then arbitrarily determines the degree of independence of their central banks and then finds that this is correlated with the past inflation performance of the country concerned. There were no tests to determine whether the results vary if one uses a different time period for the average inflation than the one chosen by the authors. There were no tests to demonstrate whether a different selection of countries, other than the seventeen picked by the study, would yield a different result.[15]

Most damning, however, is the methodology employed to determine the degree of central bank independence of the countries that were examined. Since there is no official index of central bank independence, the authors set out to create one. James Forder, an independent economist at Oxford University, has examined whether the researchers carefully followed their own definitions of independence and hence were at least internally consistent in their argument—the most basic and necessary (but not sufficient) requirement for scientific research.[16]

His findings are shattering. He uncovered a string of manipulations of the data by the original authors, which happen to produce the desired answer that a high degree of independence is associated with low inflation. Correcting for these apparent "mistakes," Forder finds that some of the data points from

the countries most crucial for obtaining the result suddenly differ. After his correction, no more statistically significant correlation could be detected between independence and inflation. Forder's conclusion: The data and method used by the economists commissioned by the European Commission do not provide evidence of any relationship between central bank independence and inflation.

The European Commission used this flawed study as the main argument for the introduction of the Maastricht Treaty of 1992, which signed Europe up for rule by the ECB under a single currency.[17] We must conclude that statistically no robust link exists between central bank independence and low inflation.

Not by Low Inflation Alone

But we saw that inflation is not the only example of central bank policy mistakes. Japan's inflation rate has been lower than the German one for the past decades. Hence by the traditional definition of the success of monetary policy, the Bank of Japan beat even the highly respected Bundesbank at its game. Japanese consumer price inflation averaged 1.5 percent in the last twenty years, compared to 2.5 percent in Germany. Consumer price inflation even turned negative in the late 1990s, averaging 0.8 percent during the decade (compared to 2.3 percent in Germany). Yet we all know that Japanese monetary policy cannot be called a success over the last decades. This proves the point that low inflation must not remain the only way to measure a central bank's achievements.

There are many other serious problems that central banks can create, such as recessions. In this case, inflation may be low, but the economy may suffer from large-scale unemployment induced purely by monetary policy. Central banks can also create deflation, which increases the real debt burden of borrowers, such as homeowners with mortgages. This is what happened in Japan and several Asian and Scandinavian countries. Again, by the measuring rod of low inflation, the central banks would have been doing a good job. But in reality they were not doing their job at all.

Central banks can also cause excessive speculative booms through their policies. That is the story of the United States, the Scandinavian countries, Japan, and most of Asia, where asset booms were accompanied by stable consumer price inflation. Once again, if measured solely by low inflation, central bankers seemed to be doing their job. But asset inflation stored up enormous trouble for the future, ultimately causing the bankruptcies of a large part of the corporate sector and pushing the economy into recession and high unemployment.

Independence Does Not Guarantee Good Policies

There is no evidence that the central bank policies leading to asset inflation and then deflationary recessions in the above countries were determined by other actors, such as governments. Instead, they were made by central banks that were largely independent from government interference concerning their crucial credit quantity policies. This shows that central bank independence alone does not guarantee economic success of monetary policy. The Swedish Riksbank, for instance, independently created a credit boom in the 1980s and a credit crunch in the 1990s. The U.S. central bank leadership was not influenced by political pressure when it increased credit creation steadily throughout the 1990s, thus creating a vast asset bubble. The central banks of Thailand and Korea independently encouraged their banks to lend excessively to the real estate sector and independently set policies that encouraged their entire corporate sectors to borrow from abroad, thus placing a precarious time bomb at the heart of their economies.[18] After this they took excessively tight policies, creating deep recessions.[19] This happened against the will of the respective governments. Most of all, the Bank of Japan acted independently when it forced the Japanese banks to create the 1980s asset bubble and then independently prolonged the subsequent ten-year recession of the 1990s, which brought down the once mighty Japanese economy.

By comparison, the Bundesbank did a reasonably good job also by our broader definition of success, as unemployment, while rising especially in the mid-1980s and late 1990s, remained significantly below that of other European countries.[20] Economic growth was fairly high throughout the postwar era, clocking up over 6 percent in real terms in the 1950s and 1960s, and averaging 2.7 percent in the 1970s, the 1980s, and again the 1990s. This is among the best of all industrialized countries. Moreover, there has neither been a deflationary credit crunch nor a nationwide asset bubble based on excessive speculation in financial investments in Germany—as happened in so many other countries the world over.

We learn two things. First, the measure of monetary policy success must be more than inflation, namely, the combination of low inflation with stable and positive economic growth. As we saw in chapter 4, growth is largely determined by the central banks, because only the creation of new purchasing power enables new growth. Central banks can manipulate their own credit creation as well as that of the private-sector banks. Increased credit creation pushes up nominal GDP. The link to inflation is simple: Growth will remain without inflation until the economy reaches the maximum potential growth rate. Credit creation beyond that may produce inflation if the newly created money is used for unproductive purposes. But whenever growth remains below the maximum potential growth rate, creating additional credit does not necessarily produce inflation.

Second, the main reason for the high esteem that is accorded to the Bundesbank by the German population is its growth orientation. If the German central bank had pushed Germany into ten years of deflation, very few commentators would have considered its policies a success despite the absence of inflation. So the crucial question is this: Did the Bundesbank achieve its policy combination of low inflation and high growth thanks to independence from the government?

The Reichsbank Was Also Independent

Many economists who argue that the Bundesbank's success was due simply to legal independence from the government forget that even the Bundesbank's prewar predecessor, the Reichsbank, was legally independent from the government. This independence existed to a great extent de facto since its foundation in 1875, because the central bank was largely privately owned and accountable to the shareholders.[21] Independence was explicitly written into law in May 1922 and lasted until 1939.[22] Until then the Reichsbank was not accountable to the people, the government, or parliament. In August 1924, a new banking law again confirmed the Reichsbank's independence from the government—"but greatly increased the influence over the central bank of Germany's foreign creditors."[23] The Reichsbank was independent from German democratic institutions, but dependent on the will of interests outside Germany. While the government could do nothing about Reichsbank policies, the central bank was under the control of the Reparations Commission, which was dominated by Wall Street bankers.[24] Needless to mention, the interests of these Wall Street firms were not necessarily identical with those of the German population.

During this time, the Reichsbank was far more independent than the Bundesbank. It was also not accountable for its policies. Yet what did this highly independent central bank do? It did much to undermine the fledgling Weimar democracy. First, it produced hyperinflation, which started in earnest in mid-1922 and peaked in late 1923 with consumer prices rising two-billionfold. From the mid- 1920s until 1933, the Reichsbank adopted highly restrictive policies. The first phase of credit tightening, between 1924 and 1926, was followed by an even worse credit crunch in 1931. In both periods, thousands of firms failed to obtain funding and went bankrupt. As we saw, for most of this time the power of life or death over firms was in the hands of Reichsbank president Hjalmar Schacht. He implemented extralegal credit controls over the banking sector of the type that we examined in great detail in this book. He used them to engage in the active transformation of the German economy by forcing the bankruptcies of many firms—a process he described as having a "cleansing" effect. His declared goal was to accelerate "rationalization," a

process that today's central bankers refer to as "restructuring" or structural change.[25]

When U.S. banks pulled their deposits from German banks in the aftermath of the U.S. credit crunch that began in 1929, the Reichsbank insisted that the banks call in their loans to German industry to pay the U.S. depositors. As had always been expected, industry had invested the money in plant and equipment. The policies of the independent Reichsbank meant that firms had to close down and sell their assets at distressed sales prices. Overnight, mass unemployment was produced. Germany was thrown into the Great Depression. For those who trust that such disastrous policies will never be repeated (surely central bankers learn from past mistakes?), chapter 17 demonstrated that the central banks of Thailand, Korea, and Indonesia virtually copied the extraordinary policies of the Reichsbank in the 1920s and early 1930s—resulting in the Asian crisis of 1997 and 1998, which also brought down governments and created record high unemployment. In a further parallel to events of the 1920s, international bankers, this time represented by the International Monetary Fund, demanded deep structural changes from these Asian nations.

The economic instability that doomed the Weimar Republic was due not only to the unreasonable demands of the victors of the First World War. It was at least as much the result of an unaccountable central bank that had excessive powers. Germany's first democracy had little chance: The government could try to create economic growth, but ultimately the power over the economy was in the hands of the central bank. Economists concluded that the Reichsbank had become a "second government" (*Nebenregierung*) that acted "dictatorially" and independently from the elected government.[26] The democratically elected government was the less powerful one.

Trust Us, We're Central Bankers

Being independent from the German government did not prevent the Reichsbank from adopting the horrific policies of the 1920s and early 1930s that ultimately proved fatal for Germany and the world, as they set the stage for the arrival of a pro-growth party, the NSDAP. We must remind ourselves that arguing in favor of independent central banks is effectively to say that politicians cannot act in the national interest. Only central bankers, neutral and objective technical experts, can make decisions for the benefit of the people.

No doubt this is a cynical view of democracy as a system. It was also the view taken by the NSDAP, which argued that politicians could not be trusted. It is a view that is not without dangers, for it turns technocrats into the rulers of our countries—a form of technocratic totalitarianism. The evidence suggests that this approach is naive. The highly acclaimed monetary technician

Hjalmar Schacht, for one, used his skills and legal powers to actively and purposely hand Germany over to Adolf Hitler. He was rewarded for his services by being reappointed as head of the Reichsbank from 1933 to 1939.[27]

So can we expect the ECB to act in the interests of the people? The first difficulty is to identify just who those people are. The ECB makes monetary policy for twelve quite diverse economies. One size of policy shoe must fit all European feet.[28] The even bigger problem is that there is no guarantee that the central bankers at the ECB are as all-knowing and benevolent as we would like them to be. So far there are few historical examples of societies that are successfully governed by a small group who are largely unaccountable for their actions. Given the enormous power that we have given into their hands, it should not surprise us if and when this power is misused.

Accountability Is Key

Back to the puzzle—why was the Bundesbank successful? Ultimately, people react to incentives. The incentive structure is usually defined by the institutional framework, and that is normally prescribed by the legal structure. So the Bundesbank's legal setup should give us some indication about what makes a good central bank. We notice that legally the Bundesbank was not just required to work toward price stability. In 1967, ten years after the founding of the Bundesbank, the parliament passed the Stability and Growth Act, which clearly set out the objectives of its policy as "price stability, a high level of employment, external equilibrium, steady and adequate economic growth." The law mandated the Bundesbank to produce low inflation *and* stable growth. This was also what the Bundesbank had in mind when it made its policies. Bundesbank president Klasen, for instance, is said to have "accorded economic growth equal priority to monetary stability."[29]

The Bundesbank is often talked about as having been the most independent central bank in the world. This is simply not true. In reality, the independence of the Bundesbank was clearly limited. To start with, central bank independence was not enshrined in the constitution and was thus not irrevocable. Moreover, the Bundesbank was only given "independence from government instructions." When this was formulated, the lawmakers, presumably remembering the lessons from Weimar, explicitly warned that this phrase "of course must not be interpreted to mean that the central bank become a state within the state."[30] While being independent from direct instruction from the government, the Bundesbank was *not* independent from the parliament, which could pass laws or give instructions if it so wished. Moreover, it was not independent from other institutions of the Federal Republic but was subject to German laws and was accountable to the federal audit agency (the Bundesrechnungshof) and the decisions of German law courts.

But even the independence from the government was limited, for the Bundesbank Law also said explicitly that "it is the duty of the Bundesbank ... while fulfilling its tasks to support the general economic policy of the Federal Government." And there is virtually no time period when the government's main policy aim was not to achieve decent economic growth. Despite the inability to give direct instructions to the central bank, government representatives could join the policy board meetings of the Bundesbank and expect the bank to support their policy objectives of near-full employment. As legal experts point out, if the government placed a different emphasis among the goals of the Stability and Growth Act than the Bundesbank—for instance, by pursuing economic and employment growth—then as long as price stability was not neglected, the Bundesbank was obliged to follow the policies of the government. Ignoring the goals of the Stability and Growth Act would have been illegal.[31]

There were other incentives embedded in the legal structure that helped make the Bundesbank successful. For instance, the Bundesbank had a decentralized structure that included in policy decisions representatives of the German states, appointed by the Bundesrat. Moreover, each regional representative was in turn advised by representatives of the various occupations, including trade unions.[32] As a result, the decision-making process of the Bundesbank was usually well balanced, reflected the various parts and regions of society, had to take government policy into consideration, and was subject to legal checks and balances.

This multifaceted accountability and consensus orientation produced the Bundesbank's fairly successful monetary policy. Of course, there were also mistakes. And the Bundesbank had enough power to cause serious problems for politicians. There are many instances where the government would have liked it to stimulate the economy more, but the Bundesbank refused. The downfall of three chancellors—Ludwig Erhard in 1966, Kurt Georg Kiesinger in 1969, and Helmut Schmidt in 1982—was directly or indirectly linked to tight Bundesbank policies.[33] Often the government, not the Bundesbank, turned out to be right.[34] But ultimately there were political limits on the Bundesbank's ability to go it alone against the interests of the population.[35]

Ironically, we must therefore conclude that the success of the Bundesbank was due less to its independence than to its subtle *dependence* on the other elements of the democratic system. The legal setup made the central bank highly accountable for its policies, and it was always clear that these policies could not consist solely of producing low inflation, but instead had to reflect the goal of stable economic growth. By contrast, the Reichsbank's failure was surely due to its excessive independence without accountability and recourse. Thus, comparing the Reichsbank and the Bundesbank, we find that the *reduction* in central bank independence and the introduction of accountability

and dependence on democratic institutions that was undertaken in the postwar period greatly enhanced the performance of monetary policy. Contrary to popular opinion, the Bundesbank's success was due to its comparative *lack* of independence.

Thus in order to determine whether the ECB is going to be successful as far as the German and European people are concerned, it is crucial to determine whether the new central bank is similarly accountable to the people to implement the twin goals of low inflation and stable growth.

The Unaccountable ECB

With the introduction of the ECB system, the German government has lost its influence over monetary policy. With the creation of the ECB, the Bundesbank Law was also revised. In the new Bundesbank Law the German central bank not only became subject to the ECB instructions, but also is no longer required to support the general policies of the government.[36] Neither is the ECB required to support the policies of the German government. It is, however, required to support the "general policy goals of the EU." The Maastricht Treaty, which defines the role of the ECB, says that the ECB has a primary mandate to maintain stable prices. It also says that "where it is possible without compromising the mandate to maintain price stability," the ECB will also support the "general economic policy of the EU," which includes among other goals "steady, non-inflationary and environmentally friendly growth" and "a high level of employment."[37]

This could be interpreted to mean that the ECB, like the Bundesbank, has to work for the twin goals of low inflation and stable economic growth. However, the emphasis is explicitly on price stability. Moreover, unlike in the case of the Bundesbank, there are virtually no checks and balances on the actions of the ECB. It is therefore practically impossible for anyone—for instance, a government, parliament, or even the (unelected) EU Commission—to enforce any specific goals or, for that matter, enforce anything at all. Unlike the Bundesbank, the ECB is independent not only from the government but also from parliaments, democratically elected assemblies, or other institutions within the EU. Moreover, the Maastricht Treaty, defining the ECB's status, includes the clause that no democratic institution within the EU is even allowed to *attempt* to influence the policies of the ECB.[38] This is unprecedented among democracies.

In addition, the ECB is far less transparent than the Bundesbank was. For instance, the deliberations of its decision-making bodies are secret.[39] It is not required to publish detailed information about its transactions (this requirement was also scrapped for the Bundesbank with the establishment of the ECB). While it has the power to obtain data from any bank or company in the EU, the ECB is not obliged to publicize that data or any specific statistics.

Not surprisingly, the ECB's statutes are already being interpreted as virtually exclusively aimed at price stability. Wim Duisenberg, when he was head of the ECB's predecessor organization, the EMI, told us that he favors "a single monetary policy which strictly aims at price stability in the euro area as a whole."[40]

Resurrection of the Reichsbank

The ECB is far more independent than the Bundesbank has ever been. It is also much more independent than the U.S. central bank, the Federal Reserve, whose legal status is far weaker and which is directly accountable to Congress and the government.[41] We find that the ECB is the least accountable central bank among advanced nations.

We must conclude that there is a danger that the incentive structure of the staff at the ECB is not sufficient to guarantee optimal economic policies. This is worrying. It suggests that the lessons of German history were not interpreted correctly and the ECB was created on the wrong foundations. Instead of adopting the features that made the Bundesbank successful—accountability and interdependence with other democratic institutions—the creators of the ECB revived the corpse of the unaccountable Reichsbank. As we saw, the story line of human misery runs quite directly from Schacht to Ichimada, who had trained with the "financial wizard," and the princes at the Bank of Japan who created the recession of the 1990s. History tells us that it is dangerous to deliver vast powers without checks and accountability into the hands of a few unelected officials. "Human wisdom nurtured by history" suggests not to revive the Reichsbank. But the creation of the ECB did just that.

Overstepping the Boundaries of Monetary Policy

The Reichsbank in the 1920s was engaged in policies that went beyond the boundaries of standard monetary policy. It engaged in structural policies and forced "rationalization" of industries. The experience of Germany during the Weimar republic shows that Japan is not the first country that is being coerced by an independent central bank into implementing deep structural reforms and "restructuring." Nor is it the last, as the experience of Eastern European, Latin American, and Asian countries under IMF tutelage shows. Their central banks, probably thanks to the allure of legal independence that the IMF promised, in almost all cases supported the IMF's arguments. Recessions and large-scale economic dislocation followed. Surely the ECB would not do such a thing in Europe?

When German politicians, including the finance minister, hinted in summer 2001 that further stimulatory policies would be needed from the ECB to

support growth, ECB president Wim Duisenberg and his colleagues repeated what the *Financial Times* describes as their "monthly mantra": calls for fiscal tightening and structural reform. During its short history, the ECB has consistently refused to create more money to stimulate the German and European economies until its conditions are met, namely, that the German and other governments implement structural changes: "Wim Duisenberg, president, and his colleagues have turned calls for fiscal discipline and structural reform into a monthly mantra. These demands have been the implicit price for an easing in monetary policy."[42] These structural changes include liberalization, deregulation, and privatization—in short, the introduction of neoliberal U.S.-style shareholder capitalism and the abolition of the well-established and successful welfare capitalism.

The parallels with Japan are disturbing. What if the ECB has already decided that the postwar German-style economic system is bad and must be scrapped? It ordered the Bundesbank to shrink its credit creation by record amounts in 2002. As the amount of money circulating in the economy shrank, demand fell and the economy moved into recession. Parallel with this, the central bank stepped up its claim that the German recession is due to its outdated economic structure. Most observers would find it hard to prove otherwise. As the recession continues, more and more experts would likely agree—all they can see is a long recession. Surely that proves that the system does not work?

Slow Growth Due to the System—or Monetary Policy?

Japan built its postwar economic system on the German model of economic development, pioneered by German economists and implemented by policymakers in the first half of the twentieth century. The system has been highly successful in achieving fast growth, the rapid overall development of the economy, a sharp rise in incomes and living standards, and a surprisingly equal distribution of incomes and wealth. In Germany, Ludwig Erhard, a proponent of the concept of a "social market economy," undertook the postwar modification of this system. The aim was to combine a market economic structure with clever government guidance—similar to what happened in Japan. There can be no doubt that the German and Japanese system of economic development has been highly successful and especially beneficial for the average citizen. It can serve as a model for developing countries.

However, this is not happening. To the contrary, both Germany and Japan are being asked by the central banks, as well as the institutions of the "international community" (such as the IMF and the OECD, as well as the ECB and the U.S. Treasury), to implement deep structural reforms. The German-style system, we are told, is bad and inefficient. The entire system needs to be

scrapped, together with the economic and social structures that it spawned. What is good for efficiency, we are told, is unmitigated U.S.-style capitalism.

No Serious Debate

This may well be a worthwhile undertaking. I would, however, like to take issue on several grounds. First, the question of whether an entire economic (and hence also social) system should be changed affects such large parts of society that in a democracy a wide-ranging public debate and far-reaching policy discussions are normally preconditions. This debate should follow the standard procedures of the democratic decision-making process and should include a discussion of the advantages and disadvantages of the German-style economic system, comparing them to the costs and benefits of U.S.-style capitalism.

Let us not forget that Ludwig Erhard and the intellectuals around him, as well as their colleagues in Japan, were fully aware of the features of U.S.-style free market capitalism. Yet they purposely chose a different system. They must have had some good reasons. The fact is, U.S.-style capitalism has major disadvantages that will not be popular in European countries. Among these are income and wealth disparities so wide that they otherwise exist only in developing countries, greater educational inequality, far larger social instability, and far higher crime rates—in other words, a society that European thinkers in the past have considered but rejected as inequitable and socially unjust.

Nevertheless, whether German citizens wish to adopt this system or not is ultimately a choice that they should make for themselves. After a suitable public debate, the voters and their representatives should make a considered decision. This, however, is not happening. It seems that such decisions are nowadays made behind closed doors by central bankers.

Second, it is not clear that the adoption of U.S.-style deregulation and U.K.-style privatization is the only solution for Germany. The German system has many worthwhile features that could be preserved, as does Japan. Would it not be better to renovate what is outdated, while leaving the structure in place? That, certainly, is more in line with European tradition.

Third, the reasons why Germany and Japan's economic systems are being criticized are suspect. There is little evidence to suggest that changing their economic structures radically and introducing U.S.-style capitalism will lead to higher economic growth. If Germany's economic structure is indeed the cause of low growth, why did Germany experience much higher growth in the early 1990s and 1980s, before the structural reform policies implemented over the past five years or so? If the German-style economic structure is so inefficient, how come it produced 8 percent real GDP growth in the 1950s? Moreover, if the U.S.-style economic system will lead to an economic recovery,

how come the United States itself moved into recession in late 2001, or ten years earlier? Clearly, the U.S. system also has business cycles. This proves that another factor besides the economic structure explains economic growth. That factor is money. And money is controlled by the central banks.

Misuse of Central Banking Power

Those in favor of central bank independence argue that central bankers should be put above politicians and governments because they are objective and not political. But the history of central banking is littered with examples of central banks overstepping their powers and engaging in highly political decisions.

The founding fathers of the United States of America were well aware of the power of banks and banking dynasties. They therefore categorically resisted the establishment of a central bank. Thomas Jefferson was a vehement opponent of central banks. The U.S. Constitution therefore enshrines the right of the government to issue money. It leaves no role for a central bank. This is why for a large part of its existence the United States did not have a central bank. Money was issued by the government or by banks in a system of free, competitive banking. America did not fare badly without a central bank: It was the fastest-growing emerging market at the time and by 1900 had just about overtaken Britain, the world's number one economic power.

The Federal Reserve was founded only in 1913 and remains half privately owned. A reluctant Congress was finally persuaded to agree to its establishment based on the argument that the central bank could step in and bail out banks when a banking crisis occurs. But when such a banking crisis did arrive in the 1930s (triggered by the Fed's very own policies of excessive credit creation), the Fed failed to act. Hundreds of thousands of farmers lost their land and livelihoods. The Great Depression changed the face of America. Yet the Fed has never been held accountable for its policies.

Lessons from Japan

Given the enormous dangers, many ordinary citizens have protested against the creation of the ECB and the scrapping of the mark. Several German politicians refused to become *Mitläufer* (those who "go with the flow") and dared to speak up against the growing tide of high-level political support for the euro. Oskar Lafontaine, for instance, argued that the ECB needed more democratic checks and balances on its policies. Implementing such checks does not mean that money should be debauched and inflation allowed. To the contrary, the only guarantor of stable money is accountability of a central bank that has been given suitable policy goals. The lessons of the Reichsbank and of the Bank of Japan are also the lessons of the ECB.

Like the Reichsbank during the Weimar Republic, the Bank of Japan has been the true government of Japan. The threat remains that the ECB is following closely in the footsteps of these dictatorial central banks.

Global Rule of the Princes

Unfortunately, the situation is not significantly different in the United States. No one disputes the power of the Fed to move markets and the economy. Yet this power is used without many actual democratic checks and balances. Whenever Fed chairman Alan Greenspan gives an account of his policies and actions to Congress, he says little of interest (and is even commended for it by the press). Nobody monitors and imposes limits on the amount of credit the Fed is creating. Thus Greenspan, through his interest rate policies, has publicly given the impression that he wanted to slow the economy most of the time from the mid-1990s onward, such as with his famous 1996 speech on "irrational exuberance." The fact is, however, that he has continued to increase the credit creation of the Fed during this time.[43] This was exactly the reverse of the policy taken by the Bank of Japan in the 1990s. While the BoJ publicly wanted to demonstrate that it was doing all it could to reflate the economy by lowering interest rates, the truth of its policy intentions was revealed by its quantitative policy: It failed to reflate for most of the 1990s. Likewise, Greenspan has expressed surprise at the strength of the U.S. economy. But whenever he raised rates, he accelerated his printing of money. The Fed has moved the economy through its quantity policies while focusing its public statements strictly on interest rates in the same way as Japan.

The Yoke of the Princes

The current power of central banks is difficult to reconcile with democracy. As long as central bankers continue to exert unchecked control over the quantity of credit and its allocation, they are the undisputed rulers of the economy. If they have such powers, they are likely to use them. This probably means the continuation of the boom-and-bust cycles engineered by central banks in the pursuit of their goals. And these goals may be quite different from what we may naively assume. As long as there is no meaningful accountability, people's lives are but puppets in their credit game.

To strengthen democracy, policymakers will have to consider changing the laws again, to make central banks accountable to parliaments for their policies—and this means their quantitative policies. Alternatively, we should heed the conclusion Milton Friedman came to after decades of research and experience dealing with the Federal Reserve: "The only two alternatives that do seem to me feasible over the longer run are either to make the Federal Reserve a bureau in the Treasury under the secretary of the Treasury, or to put

the Federal Reserve under direct congressional control. Either involves terminating the so-called independence of the system. But either would establish a strong incentive for the Fed to produce a stabler monetary environment than we have had."[44]

Short of changing the laws and making central banks directly part of the government again, an interim measure should be the establishment of government-imposed nominal GDP growth targets that central banks are required to meet within predetermined error margins and within a given time frame—under threat of meaningful sanctions. I believe that many of the business cycles and major recessions that we have witnessed since the creation of central banks would have been avoided with such an incentive structure. Otherwise, the rule of the princes will continue unabated, and to the detriment of democracy and our well-being.

Alan Greenspan's Secret

Recession—But Nothing We Can Do

Often the Princes have operated from deputy or director level positions. At times they themselves were the official head of the central banks. There is a Prince in the Western world who did not hail from the central bank that he now rules. But there can be no doubt that he is in charge and that he understands his tool kit. It is Alan Greenspan.

This trained economist did not follow the classical theories. In the 1960s, he made a name for himself by recognising the importance of credit creation. In his paper 'Gold and economic freedom', published in 1967, he argued against the excessive powers concentrated in the hands of the central banks. He went further and argued that as long as the central bankers control money, there is no freedom.

Analysing the policies of the US Federal Reserve in the 1920s, Greenspan recognised that the Fed was producing too much money and stimulated excessive bank credit creation, which "spilled over into the stock market triggering a fantastic speculative boom".[1]

His incisive analysis concludes that the Fed was responsible both for the bubble, and the Great Depression. During the entire lost decade of the 1930s, when hundreds of thousands, if not millions of Americans starved, the Federal Reserve did not do what was the sole reason for its creation: step in and print large amounts of money to reflate the economy and keep banks solvent. Instead, the Federal Reserve let tens of thousands of banks topple. As there was no deposit insurance, individual savers lost their livelihoods.

Despite the large-scale dislocation produced by the Great Depression, contemporary economists in the US and the UK advised that doing nothing was the best policy. As we saw, the classical economists claimed that the pursuit of profits ensures efficient resource allocation, leaving no need for government intervention. Since the Fed suddenly seemed to follow this creed, the US recession lasted for most of the 1930s.

Unaware that the credit policies were behind both boom and bust, observers started to believe that the system itself was responsible for the long slump. Like in the 1990s' Japan, this long recession convinced the Americans that their system had to be changed.

The rationale was the opposite of that in Japan today: thanks to the Great Depression the freedom-loving Americans could be convinced that a decentralised, federal system without strong national controls did not work. As a result, the New Deal, with its deep reforms, federal taxes and strong federal powers was successfully implemented.

Alan Greenspan does not cite his works of the 1960s any more. Indeed, as chairman of the Fed, he has avoided to use the words 'credit creation' in his speeches. Since moving from independent observer to head of the very institution that he previously criticised, Greenspan's views appear to have changed. He was appointed chairman of the Federal Reserve System in 1987 and has since done precisely what he had previously criticised about the Fed in the 1920s.

Of course, using the official monetary policy tool of the Federal Reserve, the Fed funds rate (comparable to the call rate in Japan), it seems that Alan Greenspan has been a conservative central banker. Since he successfully bailed out the large New York money-center banks through the creation of a bond market bubble (between 1991 and 1994), he has consistently raised interest rates. Moreover, he has given many speeches that criticised the 'excesses' or the 'irrational exuberance' of the stock market. His comments echoed the statements made by Prince Mieno and Prince Fukui during the late 1980s in Japan, when they were the ones that created those speculative excesses.

They also echoed the official policy declarations of the Bank of Japan during the 1990s. The Japanese central bank claimed to be doing all it could to stimulate economic growth. As evidence it pointed at the decade-long fall of interest rates.

However, interest rates are not directly related to the quantity of credit creation. But it is the latter that determines economic activity. Looking beyond the official policy tool, we found that in actual fact the Bank of Japan took policies to prolong the recession of the 1990s. Similarly, we find that Alan Greenspan, when considering the quantity of credit creation, has been doing the opposite of what he claims. Instead of trying to slow down US growth and US asset prices, Greenspan's Fed has been fuelling the flames with a historic expansion of its own credit creation and by encouraging commercial banks to keep creating more money.

New Economy

Just like in Japan in the 1980s, stock brokers have created theories to justify the high US asset prices. The most popular is the 'new economy' theory,

which argues that there is no bubble in the US. Things are fine. High stock prices merely reflect the greater potential of the economy, which has been enhanced by productivity gains. The higher productivity explains the fact that there has been no inflation.

True, if productivity rises, non-inflationary potential growth increases. However, productivity alone cannot explain the events in the US economy over the past decade. It seems more relevant that credit creation has been rising to the highest levels in over twenty years. While asset prices cannot be explained by standard economic theories, they can easily be explained by credit creation. As in Japan during the bubble, a large part of the credit creation is not used for GDP-based transactions. That explains why there has been little inflation. Instead, a lot of the extra money is used for asset transactions. And that explains the historic surge in US asset prices.

Inflationary pressures do exist, as consumers try to cash in on their speculative gains. However, the inflation figures may not fully reflect this. As rising wage costs have pushed up service sector prices, US government statisticians argued that this rise in service prices was due to the fact that services were getting better. In other words, they claimed that it was not the price of the same services that has been rising, but it has been better services, and they deserve higher prices, without this being called inflation. Put simply, with this method one could count price rises as productivity rises. This would not only improve the inflation record, but also boost the productivity record. It was evidence for the New Economy.

Old Disaster

Apart from high asset prices and stretched valuations, all the other classic signs of a credit bubble are in place: The savings rate has fallen sharply. It is now close to zero or negative. An 'inexplicable' drop in the UK savings rate also occurred as a result of the UK mortgage credit bubble of the 1980s, as households used some of their speculative capital gains for consumption. Just like in the UK, increased consumption has sucked in more imports and thus produced a trade deficit. In the US, it has clocked up new records almost monthly.

The trade deficit has only been sustainable, because of large capital inflows. Just like in Korea, Thailand and Indonesia in the 1990s. Of course, the US is in a better position, as its debt is dollar-denominated, and the Fed could simply pay it back by printing money. This will, however, not help the US dollar. Once the bubble collapses, a dollar crisis is therefore also likely.

A collapse of the dollar, however, will be the least worry of most Americans at that time. The US stock market bubble of the 1990s has overtaken Japan's

bubble of the 1980s, and the US bubble of the 1920s. Surely that is no problem, since we learn from past mistakes and this time round can avoid a Great Depression. Unfortunately, already in the 1930s observers thought that there was no problem. Learning from past credit cycles in the 19th century, Congress allowed the creation of the Federal Reserve system in 1913. Thanks to that, a bank collapse could have been avoided. What we neglected to consider was that the Federal Reserve chose not to stimulate the economy. Just like the Bank of Japan in the 1990s chose to prolong the recession there.

When the US stock market collapses and overextended banks veer on the brink of bankruptcy, individual savers will not lose their livelihood, as they did in the 1920s. America now has a deposit insurance system. The problem is, however, that due to financial deregulation, the money is not in the bank anymore. Over the past 25 years, a dramatic shift of savings has taken place, from bank deposits to the equity market. Whether directly or via mutual funds, up to 50% of individual savings are now invested in the stock market. And there is no insurance against capital losses in the stock market yet.

When excess credit creation is slowed, asset prices will fall. Speculators will lose money. Banks will be burdened with bad debts. That will reduce credit creation further. As the stock market falls become substantial, a large proportion of private sector wealth will be wiped out - just as happened in the 1920s. There was a reason why Japan's wartime bureaucrats would not allow their population to hold large parts of their wealth in the stock market - it is a zero sum game, and unlike bank credit does not increase anyone's wealth. But it will be too late. The recession that will follow is likely to be far severer than Japan's recession. For in Japan's case, individual savers did not lose a single yen. Despite talk of a 'lost decade', things were by no means anywhere near the disaster of the 1930s.

However, things won't be so easy for the US. As individual wealth collapses, demand shrinks sharply. Companies will not be able to sell their products. Bankruptcies will rise. Bad debts at banks will rise. Credit will shrink. Deflation will expand. Events of the proportion of the Great Depression will once again become possible. As foreigners stop investing in the US, a balance of payments crisis will collapse the dollar.

What does Alan Greenspan think he is doing?

Is Alan Greenspan unaware of these facts? His detailed research of the credit creation process, in which he showed a clear understanding of the mechanism that created the 1920s and 1930s cycle in the US suggests that he must know. I became convinced that he knew thanks to a personal encounter with him. I met Alan Greenspan in September 1997, at the IMF/World Bank Annual Conference in Hong Kong.

More than four years earlier, in 1993, when one of my research papers about the mechanism behind Japan's bubble economy was discussed and quoted in the UK weekly *The Economist*, I received many letters, mainly from Wall Street investment banks and the central banks.[2] All wanted to obtain the paper. The most urgent request came from the Board of Governors of the Federal Reserve System: Faxes and several urgent phone calls from associate director Dale W. Henderson let me know that 'a senior member of the board' wanted to obtain my paper as soon as possible. After I had sent it, I never heard from any of the receivers again. When I visited Dale Henderson at the Federal Reserve in Washington in 1995, and asked him who that board member was who had wanted to read my paper, he said: "That was Alan, of course".

So when I spotted Alan Greenspan in the flesh at the dinner reception in Hong Kong in 1997, I thought this might be a nice teaser as chat-up line. So I walked over and said "May I introduce myself? My name is Richard Werner. I believe you have read my research before". I expected Mr Greenspan to shake his head and quizz me "Oh yeah? Like what?". Instead he just said, and the words are still fresh in my memory: "Oh yes, Richard Werner. Credit creation. The paper on Japan. I read it twice. The article in the Economist and the actual paper." It was me who was speechless. It seemed so unlikely that this busy and powerful man would remember these details about my name and my paper after more than four years. I could not think of anything else to say, so I asked him "Well, would you venture to comment on the paper?". His answer was: "Can't remember." And he turned around and walked away. Leaving behind someone very puzzled.

Of course Mr Greenspan could remember well, as his faultless recitation of the content and place of publication of my paper after four years had proven. He was, however, clearly not in the mood to discuss it, or to be particularly friendly. I had experienced this reaction before - at the Bank of Japan. When I confronted key figures with my findings, there were no explanations, no attempts to convince me otherwise, no discussion about facts. I received the cold shoulder. I began to realise that central bankers did not like my work. I was spilling the beans on their actions.

There can be no doubt: Alan Greenspan is still up to scratch with his credit theory. He is now practicing it. He knows what he is doing. He must be the man most aware of what is happening in the US.

Alan Greenspan knows that the economic dislocation that will follow his bubble will let previous post-war economic crises pale by comparison. Individual savers will lose their money. In the words of Alan Greenspan (AD 1967): "The financial policy of the welfare state requires that there be no way for the owners of wealth to protect themselves." Large losses will be incurred by most Americans, when the Fed changes its policy and sharply and con-

sistently reduces credit creation, as it ultimately will. A Great Depression is possible. Of course, it could be avoided by the right policies.

World Currency

But the question remains, just what are the policy objectives of the Fed? What is Alan Greenspan up to? History will tell. But what it tells us so far is that the holders of power are never satisfied. It teaches that central bankers have striven consistently over the past century to increase and consolidate their power. This can be done through institutional reform, which in turn is triggered by economic crises. Their power will increase and consolidate by the creation of ever large areas under their control. This includes the creation of ever larger currency blocs. That is precisely what we are witnessing: the creation of vast currency blocs. After Europe, the Americas may be next, then Asia.

Their logic implies that the ultimate goal is to link the blocs and create world monetary union. The single currency for the world, run by a single central bank would be the culmination of power for the princes of mammon. Europeans will not refuse to join - they have already given up their national currencies. One will also be able to convince Asians to join. But Americans, as freedom-loving as ever, are likely to refuse to give up the dollar for some world currency. They are likely to argue against giving up sovereignty over the dollar. In truth, US sovereignty has long been in the hands of the central bankers. And they may find Americans just too stubborn to convince them of the single currency. Except, of course, if a major collapse of the dollar was combined with a deep domestic recession. Crises do wonders at times...

Appendix

Japanese Fiscal and Monetary Policies in the 1990s

I. Introduction

During much of the 1990s, Japan's economic performance disappointed. Actual growth largely remained below potential. The economic loss, in the form of lost output and national income, amounts to trillions of yen.[1] Unemployment is one indicator of the degree of social dislocation. Another may be the suicide rate, which rose to postwar record highs in the 1990s, apparently largely recession-induced.[2]

This underperformance occurred despite significant fiscal stimulation and interest rate reductions;. "The usual counter-cyclical macroeconomic policies have not worked in Japan," it is said.[3] Why this was so remains unexplained by traditional approaches. Instead of determining why demand-side policies to boost *actual* growth have been ineffective, many observers instead now argue that supply-side reforms are needed to boost Japan's *potential* growth rate. This is usually defined to include far-reaching institutional changes in the labor market, corporate governance, and the regulatory environment. Put simply, it is said that to improve performance, Japan must shift from a Japanese-style "bank-centered and relationship-based system" to a U.S.-style "market-based and competitive system" or from "welfare capitalism" to "shareholder capitalism."[4]

This paper proposes a theoretical and empirical solution to the "enigma" of the ineffectiveness of demand-stimulation policies. It is used to throw new light on the discussion about the need for structural reform and its link to the policies taken by the Bank of Japan.

II. Cyclical Policies Evaluated by Traditional Approaches

1. Fiscal Policy

Since 1992, ten fiscal stimulation packages amounted to ¥146 trillion. These figures may have been exaggerated by politically motivated double counting. The national income accounting data for government spending also show a significant increase from an aggregate of ¥705 trillion in the 1980s to ¥1,136 trillion in the 1990s. As a percentage of nominal GDP, this represented an increase from 20.9 percent on average in the 1980s to 22.7 percent in the 1990s. The extent of fiscal stimulation becomes even more apparent when viewed on a growth basis: On average, government spending contributed almost half of growth in the

1990s, while it contributed only a sixth of growth in the 1980s.

While the government contribution to growth increased, government revenues fell significantly, as the weaker economy reduced tax revenues. There are two options to fund the revenue shortfall: debt finance or money finance. In the former case, the government borrows from the private sector; in the latter, it either creates money directly or borrows from the central bank, which pays by creating money.[5] In Japan's case, the issuance of legal tender has been delegated to the Bank of Japan, which, since at least the late 1970s, has in practice independently decided the quantity of its credit creation (see "Monetary Policy," below). Moreover, the Finance Law does not allow the central bank to directly underwrite government bonds.[6] Thus the government borrowed from the private sector, mainly via bond and bill issuance.[7]

New government borrowing increased by ¥300.4 trillion during the 1990s (58.6 percent of 2000 nominal GDP). This raised total outstanding debt to ¥522.1 trillion by the end of 2000, amounting to 101.8 percent of GDP. Adding the new borrowing of ¥60.36 trillion during 2001, the most recent national debt figures record a new high of ¥582.46 trillion, about 120 percent of GDP.

(a) The Case for Fiscal Policy Effectiveness

Since many economists in Japan would call themselves Keynesian, fiscal spending has many supporters. The need for and usefulness of fiscal stimulation has, among others, been argued by Nagatani (1996), Yoshitomi (1996), Koo (1998, 1999), Posen (1998), and Ito (2000). The extreme position of a pure fiscalist stance is represented by Koo (1998, 1999) and Ito (2000).

Koo argues the general case for fiscal policy effectiveness: While money is neutral, fiscal policy is highly effective. The special case for fiscal policy effectiveness was made by Ito (2000) when short-term nominal interest rates had reached zero. He argued that the economy was in a liquidity trap.[8] Thus monetary policy would be ineffective and fiscal policy unusually effective, without crowding out. Hence Ito advocates fiscal stimulation in a zero interest environment (see below on monetary policy).[9] However, by arguing the case of short-term nominal interest rates that do not fall further, Ito's argument does not apply to much of the 1990s, when interest rates actually fell.

As to the expected impact of fiscal expenditures, many proponents of fiscal policy adopt a cautious interpretation of the Keynesian multiplier. Downplaying second-and third-round effects, most forecasters emphasized the role of the primary impact. To estimate the expected impact of fiscal policy, many government and private-sector economists therefore often argued that a public works project worth ¥1 trillion would boost nominal GDP by ¥1 trillion. A spending package amounting to 2 percent of GDP was commonly expected to boost GDP by 2 percentage points.[10]

Nevertheless, few authors would argue that fiscal policy has been effective. The notable exceptions are Posen (1998) and Ito (2000). The former argues that actual fiscal spending was overreported and hence a sufficiently large fiscal expansion would have been effective in ending economic stagnation and deflation. However, no empirical test—for instance, using the more reliable national income accounting data for fiscal spending—is offered in support of this argument. Using such data (see section III below), it becomes clear that sizable fiscal

stimulation did take place, but without recovery.

Ito (2000) concedes that the unprecedented six fiscal stimulation packages that were implemented between 1992 and 1994 have had "little impact" (p. 102). But he argues this does not prove fiscal policy ineffectiveness, as defined by him. "Without any fiscal stimulus, the economy undoubtedly would have contracted. The underlying economy was so weak that fiscal stimulus did not bring the economy all the way to its potential growth rate but it arguably kept things from becoming worse" (p. 102). The ceteris paribus condition is invoked, only to claim its violation. The argument relies on unspecified shocks, rendering economic growth exogenous to fiscal and monetary policy.[11] Since undefined exogenous shocks cannot be isolated or quantified, no falsification of the effectiveness claim is possible—it leaves the realm of testable hypotheses.[12] While supporters of the efficacy of fiscal spending feel that even more fiscal stimulation is the solution for Japan, they have not provided evidence that fiscal policy has been effective.[13]

(b) The Case Against Fiscal Policy Effectiveness

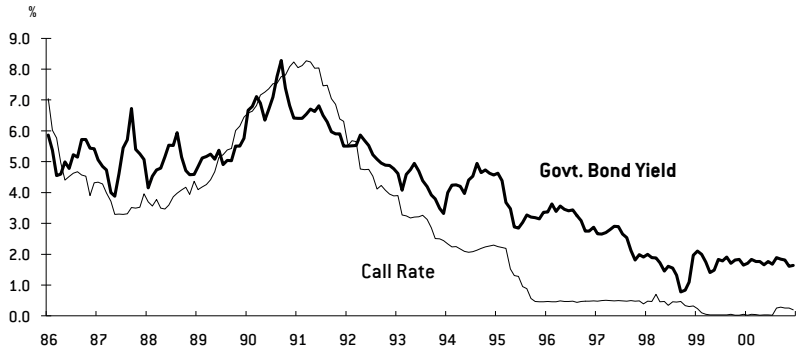
Three arguments have been proposed as to why fiscal policy could not be effective in stimulating demand in Japan. The first, by the author, will be examined below in section III. Second, it was argued that increased bond issuance to fund fiscal spending would lower bond prices, push up long-term interest rates, and negatively affect investment and economic activity. A proponent of this interest rate-based crowding out argument is Yoshida (1996), who additionally warned that the long-term interest rate rises would tend to strengthen the yen and hurt net exports. However, despite brief periods of rising long-term nominal rates, nominal interest rates, both short-term (as measured by call rates) and long-term (as measured by ten-year government bond yields), have trended down during the 1990s. There are only two instances where they rose: from 4.3 percent on average in 1993 to 4.4 percent in 1994, and from 1.3 percent in 1998 to 1.8 percent in 1999. However, in both cases rates subsequently resumed their decline to new lows (see Figure A.1).[14]

Calculating real interest rates as the difference between these nominal interest rates and consumer price inflation (measured by the CPI), we find that short-term real interest rates fell from 4.2 percent on average in 1991 to 0.11 percent on average in 2000, while long-term real interest rates fell from 3.0 percent on average in 1991 to 0.7 percent in 1998, though rising again to 2.5 percent on average in 2000. These real rates were lower than during the 1980s. These facts contradict interest rate crowding out arguments.[15]

Another case for a different kind of crowding out has been made by Krugman (1998c). Applying his model of intertemporally optimizing rational representative agents to Japan, he obtains Ricardian equivalence of the type Barro (1974) proposed: Japanese consumers believe that any fiscal spending funded by the issuance of government debt (as most of it has been) will require the debt to be fully paid off in the relevant future by raising taxes on individuals. For every yen in government spending, rational consumers would increase savings by one yen— preparing the money to repay the government in the future.

The problem with this model is that it does not allow for the possibility that the debt will be paid off by other means—such as money creation, higher

Figure A.1 **Ten-Year Government Bond Yield and Call Rate (Uncollateralized, Overnight)**



Nominal interest rates have trended down in the 1990s.
Source: Bank of Japan

corporate taxes, economic growth that boosts tax revenues without raising individual taxes, or asset sales to foreign investors. It is not clear why rational consumers would not consider these possibilities.[16] Most of all, proponents of this explanation of fiscal policy ineffectiveness have not provided any empirical evidence, as far as the author is aware.

(c) Conclusion

There is no convincing evidence in favor of fiscal policy effectiveness. However, the question of just why this was the case has not been answered by traditional approaches—neither interest rate crowding out, nor Ricardian equivalence. We will therefore return to this unresolved issue in section III.

2. Monetary Policy

The Bank of Japan has argued consistently during the 1990s that nominal short-term interest rates constitute the only practicable monetary policy tool of the central bank. According to the central bank, their repeated reduction demonstrates the central bank's resolve and aggressive action in attempting to stimulate the economy.[17] However, the weakness of the economy, despite "unprecedented" monetary stimulation, is seen as evidence that the true cause of the recession lies in nonmonetary phenomena, especially problems with Japan's economic structure.[18] The onus is thus on the government to implement such reforms, we are told.[19] While these may be deflationary and painful in the short run, they will create positive growth expectations, and hence growth itself, in the long run.

The central bank's policies have sparked debates, which we shall divide into those centering on the unusual circumstances surrounding the near-zero interest rate policy (starting about 1998) and the earlier, more general debates (starting about 1992).

(a) The Special Case of Interest Rate Policy Ineffectiveness (Since 1998)

The lowering of the overnight call rate to about 0.3 percent in September 1998 coincided with a drop in ten-year government bond yields to 0.7 percent. Both events triggered much talk about near-zero nominal interest rates in Japan and sparked the—hardly controversial—argument that interest rate policies had reached their limit.

(i) The liquidity trap argument. Choosing the definition that an "economy is in a liquidity trap if aggregate demand consistently falls short of productive capacity despite essentially zero short-term nominal interest rates," Krugman (1998a, 1998b, 1998c) finds Japan to be an example.[20] His explanation is as follows:[21] Exogenous expectations that future productive capacity will fall (for instance, due to exogenous demographic problems) result in deflationary expectations, such that even with nominal interest rates close to zero, real interest rates are above their (negative) full-employment equilibrium level.[22] Since Krugman assumes that the central bank cannot lower nominal rates below zero, and since in his model monetary policy affects the economy via its influence on interest rates, there is a problem—a liquidity trap. As evidence, Krugman musters the fact that short-term interest rates approached zero, and that the broad deposit aggregate M2+CD was not growing significantly, despite substantial increases in high-powered money by the central bank.[23]

(ii) Inflation targeting. The Bank of Japan supports Krugman's analysis. While it concludes from this that monetary policy is ineffective, Krugman dismisses fiscal stimulation for Ricardian equivalence reasons (see above), as well as structural reforms, because they constitute a supply-side policy that cannot increase demand. Since real rates are defined as nominal rates minus inflation expectations, Krugman's recommendation is to raise inflationary expectations sufficient to render real interest rates negative. This can be done by the central bank, if it can make a credible commitment that it will pursue "irresponsible monetary policy," instead of price stability or deflation. Krugman argues that agents had considered interest rate reductions to be *temporary*—to be reversed the moment prices start to rise—and thus ineffective. A credible commitment to a *permanent* increase in prices, even when inflation appears, would reverse expectations. Krugman (1998c) thus suggests the introduction of an inflation target.

There are problems with Krugman's argument. First, it is not obvious that a central bank cannot impose negative penalty-type interest rates, for instance, on excess reserves.[24] Second, Krugman's model does not answer the question of just how the liquidity trap situation developed—a question that may yield important insights.[25] As he admits, there are few solid reasons why there should be negative growth and inflation expectations.[26] Third, Krugman's transmission mechanism is based on interest rates and does not allow for quantity effects. For instance, he argues that "no matter how much money the Bank of Japan prints *now*, it doesn't matter" (1998b, p. 4). We will see the relevance of this in section III. Fourth, Bank of Japan spokesmen frequently point out that Krugman's argument is contradictory: If there is a liquidity trap and nothing more can be done (as they agree), how can the central bank possibly make a *credible* commitment

to create inflation?[27] Since the model describes no physical mechanism by which demand is stirred, it all depends on the credible commitment. But credibility is hindered by the knowledge that the central bank is merely trying to pretend to be credible, while it cannot affect the economy in any physical sense. Thus the policy is not credible. McKinnon (1999) takes the same stance by arguing that, due to the liquidity trap, inflationary expectations cannot be raised.[28] Instead of the attempt to create expectations of inflation, he suggests stirring expectations of yen depreciation "through joint action by the Japanese and US governments" (p. 187). It is not clear through what transmission mechanism in his model this depreciation should be achieved and why this policy would be any more credible than the policy to establish an inflation target.

Krugman's (1998c) initial defense is to argue that "how to actually create these expectations is in a sense something outside the usual boundaries of economics" (p. 46). He suggests legal changes to impose an inflation target on the Bank of Japan (his suggestion is 4 percent for 15 years), with the aim to create "managed inflation." Cargill et al. (2000) agree, merely differing in the size of the recommended inflation target, suggesting a "one to three percent target" as sufficient for the late 1990s.[29]Ito (2000) cites the modest growth of M2 compared to faster growth of high-powered money as evidence of a "Keynesian" liquidity trap.[30]However, he does not follow Krugman's conclusion that monetary policy remains relevant, and, like the Bank of Japan, argues that fiscal policy can stimulate the economy. Moreover, Ito also disagrees with McKinnon's proposal to set an exchange rate target—not because the policy would be ineffective, but because it would have negative effects on Japan's trade partners, and hence on Japan.

The Bank of Japan's Ueda (2001b) agrees with Ito's interpretation of the liquidity trap argument. Referring to the traditional quantity theory relationship MV=PY, and defining M as high-powered money, Ueda points out that its velocity V has fallen. In his view this is due to the liquidity trap, which he defines as a situation of near-zero short-term interest rates. Since increases in M coincide with further declines in V, there is no impact on nominal GDP (PY), and increases in the monetary base become "meaningless." As evidence, he points to the frequent incidents of money market bids falling short of the total offer, reflecting a "lack of demand" for the money the central bank is trying to supply. There is no suggestion as to *why* velocity has fallen, especially in the pre-1998 period.

Other spokesmen for the Bank of Japan also cite the liquidity trap to argue that the central bank already has done everything possible to stimulate the economy. Ueda (2001a) says that the central bank already operates a "weak form" of inflation target.[31] Any stronger version, with a clear time frame, would be counterproductive, because it could not be met, thus reducing credibility.[32] Pressed on this point, Krugman (1998c) makes a surprising retreat: If the announcement of an inflation target doesn't work, Krugman concedes, there is nothing that can be done by monetary policy. "In this case the temporary fiscal jolt once again comes into its own" (p. 59).

Attempts at defining Japan's situation before September 1998 as a liquidity trap exist, but have failed. Weberpals (1997) tested for the existence of a liquidity trap and found no empirical support. Instead, she concludes that Japan's ex-

perience has been "unique," leaving the enigma of interest rate policy ineffectiveness unsolved. More fundamentally, if the liquidity trap is defined as either a situation where short-term nominal interest rates are zero (as Krugman and others do), or in the Keynesian and Hicksian sense as a situation where short-term interest rates cannot be lowered any further, then by definition no liquidity trap existed during the 1990s (not until March 20, 2001, since in earlier periods short-term nominal rates subsequently fell). Since the liquidity trap argument only concerns the time period when there *was* a liquidity trap, it cannot explain why *pre-trap* interest rate reductions failed to stimulate the economy during the 1990s.[33] Thus the argument is incapable of addressing, let alone solving, the enigma of interest rate policy ineffectiveness.

Upon closer inspection, the liquidity trap argument implodes to the tautology that short-term nominal interest rates cannot fall further, because they have fallen by as much as they can fall.

(iii) Quantitative easing. Since economists quickly recognized that nominal short-term interest rates close to zero meant the end of many further interest rate reductions, several began to argue that the central bank might want to consider tools other than interest rates. After all, as Bernanke (2000) reminds us, even zero interest rates are not a sign that monetary policy is stimulatory, since "low interest rates may just as well be a sign of expected deflation and monetary tightness as of monetary ease" (p. 155). The unusual circumstances of near-zero interest rates have prompted even economists who normally argue in favor of interest rates as the key monetary policy tool to abandon the price of money, and instead use the quantity of money as an operating target. For many, the transmission mechanism from such quantitative policy to the economy would operate indirectly, via expectations (Hayashi, 1998). In that case, the credibility problem of Krugman's argument remains and their models cannot deliver a solution. Those who argue for a direct quantity effect on the economy have not solved the issue of velocity instability, raised by Ueda, and have also not explained the puzzle of the ineffectiveness of interest rate policy.

(b) The General Case of Interest Rate Policy Ineffectiveness

Some economists have already argued that interest rate reductions would be ineffective when interest rates were still far from zero. Their arguments are based on one of the following three approaches. First, some critics argue that monetary policy cannot stimulate the economy, since money is neutral. Within the context of the debate about Japan's economy, a proponent of the first school of thought is Koo (1998, 1999). While many theoretical models favor this view, there is no empirical evidence that money is indeed neutral.[34] We will therefore not consider this case in greater detail.

The second school of thought argues that causation runs from economic activity to money. Money is endogenous and hence monetary policy is powerless. This view is shared by Kaldor (1970) and many post-Keynesian economists.[35] In Japan, the Bank of Japan has adhered to this view during the 1990s, which we will consider in greater detail below.[36] Among non-Bank of Japan economists, Yoshikawa (1993) has been a proponent of this view.

The Bank of Japan's Okina (1991, 1993a, 1993b) explains that the central bank fulfils the double function of conducting monetary policy and acting as the lender of last resort, protecting the stability of the financial system. Currency in circulation, at the end of 1992 accounting for 93 percent of high-powered money, is not supplied by the central bank at its discretion, but only on demand from the public (when bank deposits are withdrawn and turned into cash for spending). This demand is largely transaction-based and hence closely related to nominal consumption. In the short run, the central bank cannot control currency in circulation unless it drives up short-term interest rates dramatically, so as to affect nominal consumption. However, in its function as lender of last resort, the central bank cannot allow such interest rate fluctuations, as they might lead to financial instability. Furthermore, bank reserves, the other component of high-powered money, also cannot be controlled for a similar reason: As the deadline for banks to meet their reserve requirements approaches on the fifteenth of the month, the central bank may be forced to inject more money into the call market (or absorb money from it), to prevent volatility in short-term interest rates. Hence high-powered money is not under the control of the central bank and not an exogenous policy variable. It is "not the cause, but the result" (Okina, 1993b, p. 104). The central bank's activity is reduced to smoothing the call rate, which becomes the only viable operational target.[37]

The third school holds the opposite view: Its adherents see monetary policy as exogenously determined by the central bank and capable of affecting output. Moreover, several proponents argue that the mechanism of transmission from money to the economy is not primarily via interest rates (the price of money), but also via its quantity. M. Friedman (1968, 1984), Poole (1982), Brunner and Meltzer (1983), McCallum (1985), and most economics textbooks argue that it is possible for the central bank to control high-powered money exogenously in order to implement monetary policy and manipulate the economy. McCallum (1993) points out that the Bank of Japan admits that it *can* control high-powered money if it allowed greater interest rate fluctuations. In line with this view, Iwata (1992b, 1992c, 1994) argues that the Bank of Japan's explanation and conduct of monetary policy— what he termed the "BoJ theory"—is fundamentally flawed. According to him, the central bank can exogenously manipulate the quantity of high-powered money, while there is a stable relationship between high-powered money and deposit aggregates (such as M2+CD), and between deposit aggregates and GDP. Therefore, the central bank can manipulate economic growth by controlling high-powered money. The latter is, in his view, a more appropriate measure of the stance of monetary policy than interest rates. Using this analysis, Iwata points out that the central bank tightened monetary policy too late and then failed to stimulate the economy for too long (while interest rates had been falling since 1991, the supply of high-powered money contracted for most of 1992).[38] He therefore advised in 1992 that the central bank abandon its "BoJ theory" and shift its operating target from interest rates to high-powered money. Since interest rate reductions would not stimulate the economy, the central bank should actively increase the supply of high-powered money by bill and bond purchase operations, or else it would create a recession (Iwata, 1992c).[39] The subsequent sharp increase in high-powered money and Ml silenced most proponents of this

view. Moreover, since the late 1980s it had become increasingly clear that the velocity, as traditionally defined, was not constant and hence the money-demand function was not stable. This means that increases in deposit aggregates could not be expected to imply a certain rise in economic activity (Goodhart, 1989a).

Over the following years, the central bank maintained its "BoJ theory," countering Iwata's and McCallum's arguments on the basis of the following points:

- The Bank of Japan uses lagged reserve requirements. This renders control of high-powered money impossible.
- The stable relationship between high-powered money and broad deposit aggregates broke down, since the credit multiplier is not constant;
- Broad deposit aggregates are in no fixed link to short-term interest rates, so that "the controllability of the money supply is not something the Bank of Japan's short-term money market operations can guarantee."[40]
- The stable relationship between broad deposit aggregates and M2+CD and GDP broke down;
- Growth of high-powered money has picked up significantly since 1993.[41]

McCallum (1993) points out that Okina's (1993a) reference to lagged reserve requirements fails to allow for the desirable institutional change to contemporaneous reserve requirements. While Yoshikawa (1993) agrees with the Bank of Japan's view that the money supply is largely endogenous to "real shocks" in the short-run, because "central banks smooth the nominal interest rate" (p. 122), he points out that, like in other countries, in Japan, Granger causality runs from money to output. His own empirical work finds that "monetary policy, represented by changes in the call rate, exerts substantial effects on real output in Japan mainly through its effect on fixed investment and imports" (p. 156). This is because "when the BoJ changes its policy stance... it affects real output." It turns out that the real dispute appears to be over the definition of what constitutes the short run. Thus the Bank of Japan's and Yoshikawa's endogeneity appears restricted to the very short-term, seasonal movement of the economy, within a medium- to long-term setting of exogenous monetary policy.[42] This, however, does not disable high-powered money control even in the short-term, since there is no reason why the base money targets could not be seasonally adjusted—as they indeed appear to be.

Despite the logical plausibility of the monetarist approach, the number of its critics had increased since the mid-1980s, due to the apparent velocity decline and instability of the money demand function, pointed out by Okina.[43] Additionally, monetarists who noticed the rise in Ml in 1992 and 1993, and in the late 1990s the surge in high-powered money, saw no further problems with Japan's economy and argued that there was no reason to fear a credit crunch or other monetary obstacles to growth.[44] Thus the public debate about the controllability of money aggregates abated for several years, during which the central bank emphasized the unreliability of monetary aggregates and maintained its view of endogenous money.[45] The old debate flared up again at the end of the 1990s, remaining equally indeterminate. To many observers, therefore, the enigma of interest rate policy ineffectiveness remains unsolved, just like the enigma of fiscal policy ineffectiveness.

III. Cyclical Policies Evaluated by an Alternative Framework

1. The Model

Werner has suggested an alternative framework to solve the puzzle.[46] The first step is the original equation of exchange.[47] It states that the amount of money changing hands to pay for transactions during a given time period must equal the nominal value of these transactions:

$$M = T \tag{1}$$

where M stands for the amount of money that is exchanging hands for economic transactions and T stands for the value of these transactions. For economic growth to take place, by definition the value of economic transactions during one time period must exceed that of the previous period of comparison. In other words, there must be a net increase in economic transactions during one time period. Thus considering net changes in variables yields:

$$\Delta M = \Delta T \tag{2}$$

An increase in the value of transactions (and hence economic growth) can take place only if there has been an increase in the amount of money used to conduct these transactions.

(a) Measurement of ΔM

The next step consists of identifying measurable data to represent these equations. First, consider how we can measure ΔM, the change in the net amount of nominal money used for all transactions. It may help, as illustrative exercise, to initially consider a simpler financial system that does not have a central bank (such as the United States until 1913). As in any modern financial system most transactions are paid by paper money, or else noncash transfers through the banking system.[48] Since we are interested in the increase in the net amount of money used, we need to measure the increase in purchasing power created by the banking system during the observation period. The net amount of paper money issued by the banking system and net bank transfers within the banking system can only increase when banks issue new loans.[49] We thus know that ΔM is equal to the net increase in credit in the banking system (bank credit creation).[50]

Now we can introduce a central bank. It usurps the monopoly on the issuance of legal tender and it can create new purchasing power by extending loans. Its creation of new purchasing power can be measured by adding up all its transactions within a given time period.[51] In a financial system with a central bank, then, AM is simply the net credit creation of the central bank and the banking system.

Already at this stage we can come to some uncontroversial conclusions: It is true that the decline in the value of economic transactions during the 1990s in Japan had to be accompanied by a decline in net credit creation. For the value of transactions to increase, and hence economic activity to pick up, there must also be an increase in the amount of credit created by the central bank and banks. To infer causation, we need to add information concerning bank and central bank

behavior, and their interaction with their borrowers, thus rendering the above equations behavioral relationships.

(b) Measurement of ΔT

Before we do this, consider the measurement of the value of economic transactions during a given time period. There is an agency that has access to the majority of the data on a daily basis: As Bank of Japan governor Matsushita reminded us, most of the country's transactions—¥300 trillion or 70 percent of annual GDP every day—are booked via its settlement system.[52] Unfortunately, the central bank refuses to publish such data. For this reason, proponents of the equation of exchange argued that the far cruder and older data on national income, output, or expenditure should be used as proxy. This has led to the formulation of the so-called "quantity theory of money," which rewrites the right hand side of (1) as PY (with P being the price level of GDP-based transactions, and Y referring to real GDP), and adds velocity V to the left.

Werner (1992, 1997d) has pointed out that the assumption that nominal GDP is a close approximation of the value of all transactions may not hold, since transactions, such as those involving real estate or financial assets, are not part of GDP. This is not problematic when their value grows in line with GDP. However, when their value rises faster, this will cause GDP to be an unreliable proxy. Then we must expect the traditional quantity theory of money, MV=PY, to give the appearance of a fall in velocity V, as money is increasingly used for transactions other than nominal GDP (PY). This explains why in many countries with asset price booms economists puzzled over an apparent "velocity decline," "breakdown of the money demand function" or a "mystery of missing money"—issues that severely hampered the monetarist approach to monetary policy implementation. According to Werner, if GDP is used to represent transactions, and if there is an indication that non-GDP transactions increase or fall, the equation of exchange must be disaggregated into transactions that are part of GDP ("real transactions") and those that are not (non-GDP or "financial transactions").[53]

In theory, we can disaggregate the transaction data of equation (1) any way we wish. It will become an empirical issue whether we can find statistical data to proxy the theoretical breakdown. We proceed with the following disaggregation of (2), by dividing both the amount of money changing hands and the value of transactions into those that are part of the GDP definition (ΔM_R and ΔT_R) and those that are not (ΔM_F and ΔT_F).

$$\Delta M = \Delta M_R + \Delta M_F \tag{3}$$

$$\Delta T = \Delta T_R + \Delta T_F \tag{4}$$

At the same time:

$$\Delta M_R = \Delta T_R \tag{5}$$

$$\Delta M_F = \Delta T_F \tag{6}$$

Since we defined DT_R as the value of all GDP-based transactions, we also know that the following holds:

$$\Delta T_R = \Delta(P_R Y), \tag{7}$$

where P_R refers to the GDP deflator. Together with (5), we can say that the rise (fall) in the amount of money used for GDP-based transactions is equal to the rise (fall) in nominal GDP:

$$\Delta M_R = \Delta(P_R Y) \tag{7'}$$

(c) Endogenous Money

We now need to address the issue of causality. As we have seen, there is a school of thought that argues that money, defined as deposits, is endogenous. When considering the credit creation process, it is clear that deposit money is always endogenous to the creation of credit. The more interesting question is therefore whether credit creation is endogenous or exogenous. While the central bank may at times choose to conduct certain transactions in response to market demand or seasonality (such as parts of its call market transactions or issuance of paper money), there is no doubt that it can still exogenously determine its total credit creation (any transaction it might feel forced to undertake due to short-term interest rate smoothing can be sterilized by other transactions, such as outright bond sales, that may not affect short-term interest rates). Central bank credit creation is therefore exogenous. However, it accounts for only a fraction of total credit creation. The dominant question is consequently whether bank credit is endogenous or exogenous.

To reject the hypothesis of endogeneity, we need evidence that banks do not always lend to everyone as much as demanded. Much empirical evidence has been gathered in studies to the effect that at one time or another credit has been rationed (especially to small firms).[54] Anyone who has ever applied for a bank loan and was turned down can confirm that banks do not always lend to everyone who wants to borrow.

Deductive logic also provides an answer. On the basis of a large number of restrictive assumptions, including perfect information, a Walrasian-style equilibrium is postulated in the credit market. Relaxing the assumption of perfect information or an all-knowing price-setting auctioneer, we find that markets cannot be expected to clear. Nonclearing markets are rationed. Rationed markets are determined not by the price, but by the quantity—according to the "short principle" that says that the smaller of demand or supply will determine the outcome.[55] Since the very existence of money testifies to the existence of less than perfect information, we have no evidence supporting the claim of perfect information. The credit market is therefore likely to be rationed.

Stiglitz and Weiss (1981) come to the same conclusion. Due to the limited liability of directors, entrepreneurs with risky projects will still attempt to obtain bank loans. Since the actual demand for credit is thus relatively large, it is not rational for banks to raise interest rates until credit demand and supply curves meet: Adverse selection and moral hazard would raise their default risk. As a

result, profit-maximizing banks will ration credit.[56]

Given the above considerations, as well as empirical evidence, we must conclude that the credit market is likely supply-determined and causation is expected to run from the credit variable (M) to the transaction variable (T)—just as most empirical studies of Granger causality have found (see also Werner, 1997d). The total amount of credit creation constitutes the ultimate budget constraint in an economy that is quantity-rationed by it.[57]Werner (1992, 1997d) has used the behavioral relationship derived from equations (5) and (6) to explain theoretically and empirically the movement of asset prices, capital flows, and nominal GDP of Japan in the 1980s and early 1990s.[58]

This also settles the dispute about the question whether there has been a credit crunch in Japan (or other countries) at one time or another: If a credit crunch is defined as credit rationing, then it virtually always exists. The issue becomes one of ascertaining the degree of rationing.[59] Light is also shed on the debate about the existence of a "credit channel" of monetary transmission, which has been hampered by the erroneous definition of banks as mere financial intermediaries.[60] When it is recognized that banks are special as creators of purchasing power (something capital markets cannot do), a "credit channel" not only exists, but is the main channel of transmission.

The Bank of Japan agrees that credit aggregates are important.[61] Moreover, our finding is consistent with other econometric evidence, such as Bayoumi's (1999), who concluded, "Changes in bank lending help to explain the rise in output in the early- to mid-1980s and more recent weakness in activity, indicating that shocks to bank lending can also generate significant movements in output" (p. 14).[62]

Based on our model, the "asset bubble" of the 1980s is recognized as being due to excessive credit creation for non-GDP transactions, driving up asset prices (equation [6]). Once credit creation tightened, excess lending had to turn into bad debts, resulting in a credit crunch and subsequent recession (see Werner, 1991b, 1992, for such a warning that is now less controversial than a decade ago). Falling credit creation implies that the total amount of transactions in the economy must shrink, creating unemployment and deflation. This increases bankruptcies and in turn exacerbates the bad debt problem, rendering banks more risk-averse, thus reducing their supply of credit further. Based on the model, it was predicted that neither increases in high-powered money, increases in the money supply, reductions in interest rates, nor fiscal stimulation was necessary or sufficient condition to stimulate the economy—while an expansion in net credit creation was.[63]

2. Explaining the Anomalies

(a) The Ineffectiveness of Interest Rate Policy

We notice that in this framework there is no role for interest rates.[64] As the author argued well before the arrival of zero interest rates, even zero interest rates could not be expected to be helpful if bad debts prevent banks from lending and if the central bank does not increase its credit creation to compensate. This is immediately visible from equation (7'): nominal GDP is constrained by the net cre-

ation of credit. The ineffectiveness of interest rate policy is therefore not a special phenomenon of the zero-interest-rate environment. It is a general phenomenon.

(b) The Ineffectiveness of High-Powered Money

One of the prescriptions of our model is to increase central bank credit creation. However, as noted above, an increase in banks' voluntary excess reserves with the central bank, for instance, would constitute an increase in high-powered money but may not coincide with an increase in the central bank's credit creation.

(c) The Ineffectiveness of Deposit Aggregates

We have seen that the breakdown of the correlation between "money supply" deposit aggregates and nominal GDP in many countries in the 1980s and 1990s is due to (a) the violation of the assumption that Y represents all transactions in equation (1) and (b) measuring the money that changes hands for transactions during a given time period by deposit aggregates. Since there are many different ways of aggregating private-sector assets, it is a priori not clear which subset of possible savings measures (e.g., M1, M2, M3, M4, etc.) would accurately proxy the increase in purchasing power that is due to credit creation. Shifts in asset holdings (due to various factors, such as changes in institutional arrangements and regulations) across the definition domains of the various savings aggregates render any correlation with credit creation unreliable. Attempting to increase the growth of any arbitrary deposit aggregate is therefore neither necessary nor sufficient for an increase in economic activity. The Bank of Japan has correctly pointed this out.[65]

(d) The Ineffectiveness of Fiscal Policy

Our framework also provides insights into the effectiveness of fiscal policy. As Werner (1994b, 1995b, 1996c, 1997f, 1998f) has pointed out, pure fiscal policy that is not linked to credit creation cannot boost economic growth. We can see this immediately by breaking equation (7') further down into its components (assuming here, for sake of simplicity, that net exports remain equally large each period):[66]

$$\Delta M_R = \Delta(P_R Y) = \Delta(C + I + G) \tag{8}$$

where C, I, and G stand for *nominal* household expenditure (including housing investment), private-sector investment (including inventory), and government expenditure (including inventory). If banks do not increase lending for GDP-based transactions, and if the central bank fails to compensate for this, so that its credit to the economy remains unchanged (again for sake of simplicity; both assumptions are dropped below), then there cannot be an increase in total transactions:

$$\Delta M_R = 0 = \Delta(C + I) + \Delta(G) \tag{9}$$

In other words, nominal GDP growth will be zero, because there is no credit creation. The national income pie remains unchanged. If under these circumstances the government increases its nominal spending G (its share of the pie),

we know that this must be met by an equally large decline in private-sector activity:

$$\Delta G = -\Delta(C + I) \tag{9'}$$

As the government issues bonds to fund increased fiscal stimulation, private-sector investors (such as life insurance companies) that purchase the bonds must withdraw purchasing power elsewhere from the economy. The same applies (more visibly) to tax-financed government spending. With unchanged credit creation, every yen in additional government spending reduces private-sector activity by one yen. While such an argument is recognized in the literature (see Goodhart [1989b]), it has not received attention.

(e) The Failure of Interest Rate Crowding Out and Ricardian Equivalence

With an unchanged national income pie (restricted by ΔM_R, the budget constraint on the economy), any increase in government spending must shrink the private-sector share of the pie. We observe a different kind of crowding out than has been postulated so far in the Japanese case: Unlike the Keynesian interest rate-based crowding out, and like Ricardian equivalence, it is quantity-based and does not require any particular movement in interest rates. It therefore fits the observation of the 1990s that interest rates did not rise. Unlike Ricardian equivalence, it does not depend on restrictive assumptions about unobservable expectations and their formation. Moreover, it does not operate via a change in household savings. Instead, crowding out occurs due to the lack of new credit.

3. Evaluation of the Model

In order to evaluate this model and compare its performance with the competing theories, it is useful to determine criteria for deciding among competing explanations. The two most important criteria accepted in science are empirical evidence and the principle of parsimony. The latter is the criterion suggested by formal logic for this purpose, and is better known after one of its proponents as "Ockham's Razor": One should always choose the simplest explanation of a phenomenon, the one that requires the fewest leaps of logic—or, as economists would say, the least restrictive set of assumptions.[67] Friedman (1953) also suggested the accuracy of forecasting as a criterion. We will apply all three criteria.

(a) The principle of parsimony

Our model requires far fewer assumptions than alternative models (specifically, it does not require the assumption of perfect information or that markets clear). Moreover, it can explain the "anomalies" that previous models could not. According to Ockham's Razor, our model is therefore preferable.

(b) Forecasting ability

The model was not proposed with the hindsight of the experience of the 1990s, but at the beginning of the 1990s. Its forecasting abilities have been tested almost over the entire period of the 1990s, in the original meaning of "forecasting." For instance, based on this model, already in the early 1990s the prediction

was made that declining credit growth would lead to increased bad debt problems and a severe recession (Werner, 1991b), that fiscal policy would crowd out private activity, that interest rate reductions, even to zero, would not stimulate the economy, and that credit creation was necessary and sufficient for a recovery (see Werner, 1994b, 1995a, b, c). Based on this model, the forecast was also made that the sudden expansion in credit would create a surprise recovery of 4 percent real GDP growth in 1996 (Werner, 1994c, 1995e). There are no competing models that produced these or similar predictions.

(c) Econometric evaluation

Following Werner Werner (1992, 1997d), we use bank credit used for real estate transactions to represent M_F.[68] However, simply estimating (7') would imply a weak test of our framework, since we would allow our theoretical knowledge to influence our choice of variables and functional form. We therefore adopt the Hendry methodology of sequential downward reduction of a general (autoregressive distributed lag, ADL) model to its specific, parsimonious form (see Davidson et al. [1978], Hendry and Mizon [1978]; Hendry [1979, 1986, 1987, 2000]). This approach provides the strictest empirical test of a model, since it lets the data speak in application of Ockham's Razor to econometrics.

(i) The determinants of nominal GDP. We therefore formulate a general empirical model of nominal GDP that includes explanatory variables suggested by competing theories, with a general ADL structure, based on quarterly statistics:

$$(10) \quad \Delta GDP_t = \alpha_j + \Sigma\beta_j\Delta GDP_{t-j-1} + \Sigma\gamma_j\Delta M_{Rt-j} + \Sigma\delta_j\Delta WPI_{t-j} + \Sigma\varphi_j\Delta MS_{t-j} + \Sigma\omega_j\Delta HPM_{t-j} + \Sigma\rho_j Short_{t-j} + \Sigma\tau_j Long_{t-j} + \Sigma\varphi_j ODR_{t-j} + \varepsilon_t$$

Since the variables other than interest rates display a marked seasonal pattern and we are interested in the growth rates, we are using logarithms and seasonal differencing (commonly applied by financial market researchers in the form of year-on-year percentage changes), with

GDP = nominal GDP
M_R = credit used for GDP transactions
WPI = wholesale price index
MS = money supply M2+CD
HPM = high-powered money
Short = call rate
Long = ten-year JGB yield
ODR = official discount rate

Using the PC-Give software, we sequentially reduce to the parsimonious form, which is:

$$(11) \quad \Delta GDP_t = \alpha_j + \beta_1\Delta GDP_{t-1} + \beta_3\Delta GDP_{t-3} + \gamma_0\Delta M_{Rt} + \varepsilon_t$$

For eye inspection purposes, Figure A.2 plots the growth rates of M_R against nominal GDP. Visual inspection indicates that the probability of a spurious

Figure A.2 **Credit in the "Real Circulation" and Nominal GDP**

An objective downward reduction to the parsimonious model has left us with credit used for GDP transactions (MR) as the sole explanation of nominal GDP Interest rates, high-powered money, and money supply variables dropped out as insignificant.

Source: Bank of Japan, EPA, Cabinet Office, Profit Research Center Ltd.

Table A.1 **Estimation Results of GDP Model**

The estimation sample is: 1990 (1) to 2000 (4); Dependent variable: ΔnGDP

	Coefficient	Std. Error	t-value	t-prob.	Part.R^2
Constant	0.00381350	0.002228	1.71	0.095	0.0683
ΔnGDP_1	0.326688	0.1293	2.53	0.016	0.1376
ΔnGDP_3	0.222120	0.1059	2.10	0.042	0.0991
ΔM_R	0.406689	0.09980	4.08	0.000	0.2934

Sigma	0.00995221	RSS	0.00396186124
R^2	0.88463	F(3,40) =	102.2 [0.000]**
log-likelihood	142.502	DW	1.87
no. of obsv.	44	no. of parameters	4
mean(ΔnGDP)	0.0211887	var(nGDPYoY)	0.000780463

AR 1–3 test:	F(3,37)	= 0.45124 [0.7179]
ARCH 1–3 test:	F(3,34)	= 0.93630 [0.4338]
Normality test:	$Chi^2(2)$	= 0.13829 [0.9332]
hetero test:	F(6,33)	= 0.20716 [0.9721]
hetero-X test:	F(9,30)	= 0.55406 [0.8229]
RESET test:	F(1,39)	= 0.00046 [0.9830]

correlation is low, as after seasonal differencing the time trend is not strong and the differences between the variables do not have a clear tendency to rise or decline.[69] The regression results are shown in Table A.1. We find that the explanations of nominal GDP advanced by traditional models, such as high-powered money, money supply, short-term interest rates, or long-term interest rates, drop out of the model as insignificant (confirmed by formal omitted variable tests). Lowering (or raising) interest rates on its own does not have any significant impact on economic growth. What remains is the variable that our theory indicated: credit creation used for GDP transactions. The model is robust and well defined, without visible statistical problems (e.g., in the error term or the specification of the functional form). The findings confirm that we have found useful empirical proxies for the variables in our theoretical equations. Finally, statistical causality tests reveal that credit in the "real" circulation Granger-causes nominal GDP at the 1 percent significance level, but there is no statistical causality in the other direction.

We can now proceed to test the quantity crowding out that the theory has identified.

(ii) Testing for quantity crowding out. We now proceed to test the fiscal policy ineffectiveness proposition of the model. Unlike the case of equations (9) and (9'), credit creation was not zero during the 1990s. There were periods of significant credit contraction (such as in 1992 and 1997) and significant credit expansion (such as in 1996 and 1998). As we saw, they were closely related to nominal GDP growth, irrespective of fiscal policy. To control for those changes in credit creation, we solve (9) for the dependent variable, domestic demand:

$$\Delta(C + I) = \Delta M_R - \Delta G \tag{12}$$

We expect the coefficient of ΔG to be –1. Similarly, in our empirical model for an open economy we note that:

$$DGDP_t = DC_t + DI_t + DG_t + DNX_t \tag{13}$$

Substituting (13) into the empirical equation (11) and solving for nongovernment demand, we obtain:

$$\Delta(C_t + I_t + NX_t) = \beta_1 + \beta_2 \Delta GDP_{t-1} + \beta_3 \Delta GDP_{t-3} + \beta_4 M_{Rt} + \beta_5 \Delta G_t + \varepsilon_t \tag{14}$$

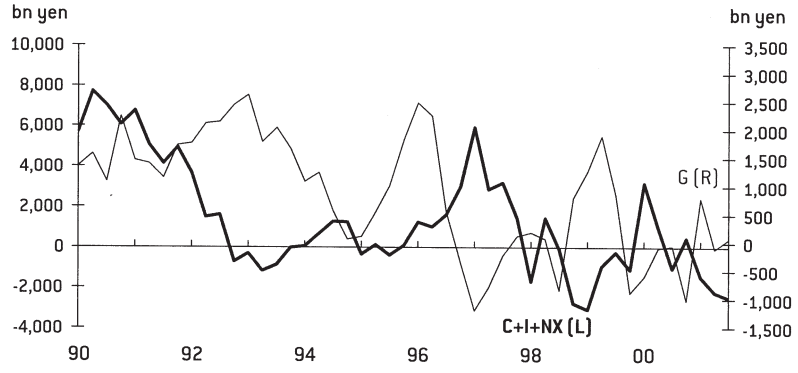
If we have found suitable empirical proxies for our model, a regression demonstrating perfect quantity crowding out would yield the following coefficient for government expenditure:

$$\beta_5 = -1$$

We use year-on-year changes of all variables. Figure A.3 shows changes in government spending and private demand. Eye inspection indicates that there is some form of negative correlation. The results of the regression are shown in Table A.2.

The coefficient for government expenditure (β_5) is –0.95697. Rounding to one digit, we obtain: $\beta_5 = -1.0$. The test indicates that for every yen in government

Figure A.3 **Private and Government Demand**



When considering the absolute seasonal differences of private demand and government expenditures, eye inspection indicates that there appears to be some form of negative correlation between the two variables.

Source: EPA, Cabinet Office

spending that is not monetized (and hence not supported by credit creation), private demand shrank by one yen. Fiscal policy was practically perfectly ineffective. The empirical evidence supports our conclusion that an economic recovery can take place only if there is an increase in credit creation. Neither interest rate nor fiscal policies can be expected to be useful. What kind of policies should be taken is discussed below.

(d) Conclusion of Evaluation

By all three criteria our model must be considered preferable to other theories. In addition, it is the only framework that simultaneously explains all the puzzles surrounding Japan in the 1990s.

This includes the breakdown of the stable link between standard monetary aggregates, such as M1 or M2+CD, and economic activity (in this alternative framework, the correctly defined velocity remains stable). It also includes the failure of interest rates to explain explain economic growth or asset prices—on the latter see French and Poterba (1991), Noguchi (1990), Asako (1991) for the problem and Werner (1997d) for a solution. Moreover, Japanese capital flows could not be explained in the 1980s and 1990s, while Werner's model (1994, 1997d), based on credit, could do so. Put simply, credit creation expanded beyond the needs of the "real" economy. It was used for nonproductive asset transactions and pushed up asset prices (creating the impression of a velocity decline, pushing up asset prices and resulting in capital outflows). However, unproductive credit creation turned into bad debts, raising banks' risk aversion in the 1990s. Tighter lending criteria produced a "credit crunch," and shrinking credit growth meant that GDP growth and asset prices had to fall.

Table A.2 **Estimation Results of Private Demand Model**

The estimation sample is: 1990 (1) to 2000 (4); Dependent variable: Δprivate

	Coefficient	Std. Error	t-value	t-prob.	Part.R^2
Constant	430.797	323.8	1.33	0.191	0.0434
ΔnGDP_1	0.369348	0.1275	2.90	0.006	0.1770
ΔnGDP_3	0.203399	0.1110	1.83	0.075	0.0792
ΔM_R	0.0151281	0.004390	3.45	0.001	0.2334
ΔG	**–0.956970**	0.2057	–4.65	0.000	0.3570

Sigma =	1233.28	RSS	= 59317732.9
R^2 =	0.823256	F(3,40)	= 45.41 [0.000]**
log-likelihood =	–372.946	DW	1.77
no. of obsv. =	44	no. of parameters	5
mean (Δprivate)	1406.38	var (Δprivate)	1406.38

Solved static long-run equation of Δprivate:

	Coefficient	Std. Error	t-value	t-prob.
Constant	430.797	323.8	1.33	0.191
ΔnGDP	0.572747	0.1048	5.46	0.000
ΔM_R	0.0151281	0.004390	3.45	0.001
ΔG	**–0.956970**	0.2057	–4.65	0.000

Long-run sigma = 1233.28
ECM = Δprivate – 430.797 + 0.95697*ΔG – 0.572747*ΔnGDP – 0.0151281*ΔM_R;
WALD test: $Chi^2(3)$ = 179.476 [0.0000] **

AIC =	14.3415	SC =	14.5443
HQ =	14.4167	FPE =	1.69380e+006

When the log-likehood constant is included:

AIC =	17.1794	SC =	17.3821
HQ =	17.2546	FPE =	2.89293e+007

AR 1–3 test:	F-form F(3,36)	= 0.58896 [0.6262]
ARCH 1–3 test:	F(3,33)	= 1.4770 [0.2387]
Normality test:	$Chi^2(2)$	= 0.68778 [0.7090]
hetero test:	(8,30)	= 1.5833 [0.1717]
hetero-X test:	F(14,24)	= 1.7418 [0.1123]
RESET test:	F(1,38)	= 0.056661 [0.8131]
Skewness		= –0.17285
Excess Kurtosis		= –0.025167
Asymptotic test:	$Chi^2(2)$	= 0.22026 [0.8957]

Credit growth was supply-determined by the Bank of Japan virtually in the entire postwar era. Supply-determination of credit occurs when there is excess demand for loans. This exists when either one or both of the following conditions is met:

(1) asymmetric information forces banks to ration credit in equilibrium (see Stiglitz and Weiss [1981]); (2) there is a systemic pricing and risk externality in the market of an asset that is used to collateralize loans. Banks could increase loan demand by raising the loan-valuation ratio; each individual bank considered land safe as collateral whose price is externally fixed. However, in reality land prices were not exogenous, but determined by the collective bank behavior; see Werner (1997d).

4. Policy Implications

Our framework allowed the early policy prescription that interest rate reductions and pure fiscal policy would not be helpful. Increases of high-powered money and M2+CD would also not provide an indication of an impending economic recovery. It was pointed out early on that with the ability of banks to create credit severely impaired by bad debts, an economic recovery could be created by a policy of aggressive expansion of both central bank and bank credit.[70] Werner referred to such a policy of broadly expanded credit creation *ryōteki kinyū kanwa* (quantitative monetary easing; see, for instance, 1995c), in line with the traditional Bank of Japan nomenclature.[71]

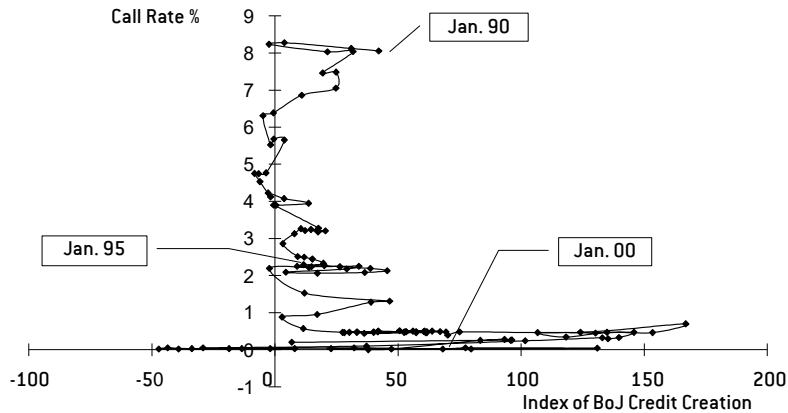
(a) Expanding Central Bank Credit Creation

The Bank of Japan's argument that monetary policy is powerless with zero interest rates, as well as its explanation of how it has been conducting monetary policy, hinges on interest rates being the only mechanism for transmission.[72] We have shown that monetary policy works mainly not via interest rates, but by more straightforward quantity effects. Instead of high-powered money, preferred by monetarists, Werner recommends as an operating target the net quantity of credit creation, measured by the sum of all central bank transactions, including those outside the money market operations.

Against the central bank's argument of money endogeneity and that "monetary policy cannot directly generate demand" (Hayami, 2001), Werner (1995c, 1996a, 1996c, 1997a) points out that, first, there has been excess demand for money (though largely from institutions and individuals that had no direct access to the "closed" call market, where the so-called open market operations are conducted, namely, small firms and the government); second, even if there was no demand for money, the central bank could simply create more money and inject it through its purchase operations, which would increase demand and stop deflation; third, the central bank should conduct true open market operations, not just with the small number of participants in the restricted call market, but directly with the nonbank sector of the economy. Iwata (1999, 2000a) supports this argument.

The central bank can increase purchasing power in the economy by engaging in net purchase transactions of assets (not only those arbitrarily defined as money market transactions). The central bank's counterargument in the pre-zero-interest-rate era that increased asset purchases might unduly reduce interest rates has no merit, because (a) it is not clear that interbank rates would fall proportionately to asset purchases of various types (including government bonds and

Figure A.4 **Bank of Japan Credit Creation and Call Rate**



The quantity of central bank credit creation appears to be in no particular relationship to the price of short-term credit (the call rate). The BoJ has increased or decreased the quantity of its credit injections at virtually any given interest rate. This would be expected in a disequilibrium environment, where prices are not necessarily related to quantity changes. The policy implication is that the Bank of Japan could have stimulated the economy by further increasing the quantity of credit at any given call rate.

Source: Bank of Japan, Profit Research Center Ltd.

bills, bills of exchange, commercial paper, foreign currency etc.), and (b) if rates do fall, there is little conceivable negative impact on the economy during times of recession.

Figure A.4 shows the central bank's total credit creation (on a year-on-year basis, shown as index) plotted against the call rate. The evidence is consistent with our model: There is no clear relationship between the call rate and the quantity of money the central bank injects into the economy: At any chosen call rate, the Bank of Japan has been able to inject more money (for instance, as in early 1998, when its credit creation was at a twenty-five-year high) or less (for instance, as in much of 1999, when its credit contracted by the largest amount in the postwar era—notice that compared to the highly expansionary policy of 1998 interest rates hardly changed). While some minor components of its total credit creation may be partlyendogenous due to smoothing operations, there is no indication that this is true for the total of its transactions.[73] Among the policy proposals to increase central bank credit creation, Werner included aggressive purchases of financial assets (bills, government bonds, corporate bonds, equities, foreign exchange, preferred bank stocks; the bad debts of the banks at face value), real assets (real estate, creating "BoJ parks" in Tokyo), and direct central bank lending to the corporate sector.[74] Since about 1998, several of these policy recommendations have been seconded by others.[75]

Werner pointed out that empirically the Bank of Japan was largely sterilizing, at times even oversterilizing, the foreign exchange intervention ordered by the Finance Ministry, such as in 1994 and 1995, and again in 1999.[76] In order to increase credit creation, Werner argued, the central bank should refrain from sterilization.

This argument is supported by Hamada (1999). Werner's argument that the correct way to measure the central bank's currency intervention is its total credit creation, and that therefore there is no economic difference between bond purchases and foreign exchange intervention, is supported by Iwata (2000a).

Another way to increase credit creation is for the central bank to create money and transfer it to each taxpayer in the country.[77] Unlike tax reductions, this present would constitute monetary policy and hence not crowd out private activity. In general, the central bank should target its own and banks' credit creation in order to achieve a nominal GDP growth target.[78] Since the central bank was granted independence in terms of its operational and policy goals from the democratically elected government in 1998, it may in practice not be easy to implement any of these suggestions. Therefore, Werner (1997b, 1999j, 2001a) suggests revision of the Bank of Japan Law to enable government imposition of a nominal GDP growth target that the central bank is required to meet within a given period (within a predetermined error margin, with severe and credible penalties on all senior staff for noncompliance).

(b) Expanding Bank Credit Creation

For bank credit creation to rise, banks' risk aversion needs to be lowered. This can be achieved by writing off the bad debts, for which banks require money. The question is therefore reduced to determining where this money should come from and what the providers would obtain in return. A nonexhaustive list would be: the taxpayer/the government, the central bank, private investors. The issue of how much money would be put up and what would be received in return ranges from providing enough money to make up for the book value (face value) of the loans and obtaining nothing in return to putting up less money and getting much in return (including ownership of the banks). Since various interest groups (including the central bank) are involved, the choice of the particular scheme becomes a question of political economy.

Economists can, however, suggest the most efficient scheme from the viewpoint of the entire economy. Werner (1994b, 2001a) has suggested that the central bank, in fulfillment of its function, solve the bad debt problem in the banking system by conducting a one-off purchase operation of all declared bad debts from the banks at the original book value.[79] The banks' balance sheets would immediately be among the strongest in the world, and they could begin to engage in their normal credit business again. Unlike a fiscal bailout, this would not burden the taxpayer and thus would also not crowd out the private sector. Moreover, it would be a "free lunch," since there would be no cost to the economy.[80]

The moral hazard principle strengthens the case for this scheme: Tax-funded bank rescue schemes have been proposed, despite the fact that the taxpayer has not been responsible for the banks' problems. Is it justified to make the banks or their shareholders pay? B. Friedman (2000) asks: Is it "fair to treat Jap-

anese banks as strictly private firms, whose shareholders and managers should appropriately be subject to market discipline when their institutions' affairs go badly? Under Japan's traditional system of administrative guidance of the entire financial sector ... perhaps the banks, in lending so aggressively against rapidly inflating real estate and equity values, were merely acting as agents of public policy. If so, then the conventional rationale underlying the argument for exposing these institutions and their managers to market discipline would not apply" (p. 55). Werner (1998d, 1999a, 1999d, 2001a, 2002a) has shown that the banks' excessive credit creation was ordered by the Bank of Japan (and by officials who have remained in charge of its policy during much of the 1990s). Given the central bank's responsibility, to avoid moral hazard it is reasonable to ask it to fund the bailout.[81]

Other proposals made by Werner to increase bank credit creation include the creation of profits through bond market operations, measures to introduce zero-risk borrowers to banks (government and central bank guarantees on loans to small and medium-sized enterprises, bank lending to the government), and measures to relieve market pressure on banks (exemption from BIS capital adequacy, relaxation of accounting standards).[82]

(c) Linking Fiscal and Monetary Policy

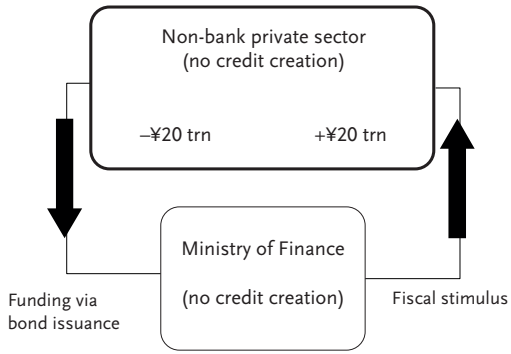
As we have seen, fiscal policy has been ineffective during the 1990s because it was not supported by monetary policy. Monetization could easily have occurred if the central bank had significantly increased its bond purchases earlier in the 1990s, as Werner argued.[83] The potential lack of policy coordination is another reason why the wisdom of rendering central banks independent and unaccountable from governments may be questionable.[84]

Werner (1994b, 1998b, 1999h, 2000a, 2000b, 2001a) has suggested a policy for governments to monetize fiscal policy even without cooperation from an independent central bank. The method renders fiscal policy effective.[85] Similarly to the central bank, the ministry of finance can also create new money and thus increase transactions and growth by shifting funding of its public-sector borrowing requirement away from bond finance and instead borrowing from the commercial banks via simple loan contracts.[86] So far, only a fraction of public borrowing has taken the form of borrowing from banks. Although the central government funded parts of the 1998 budget from banks, this has remained negligible. By raising most money through bank loans, the government can increase credit creation and thus monetize fiscal policy. Figures A.5 and A.6 are used to illustrate the difference between stimulatory fiscal policy—here the example of a fiscal spending package—funded via bond issuance taken up by investors, such as life insurers, and stimulatory fiscal policy that is backed by credit creation.

5. Conclusion

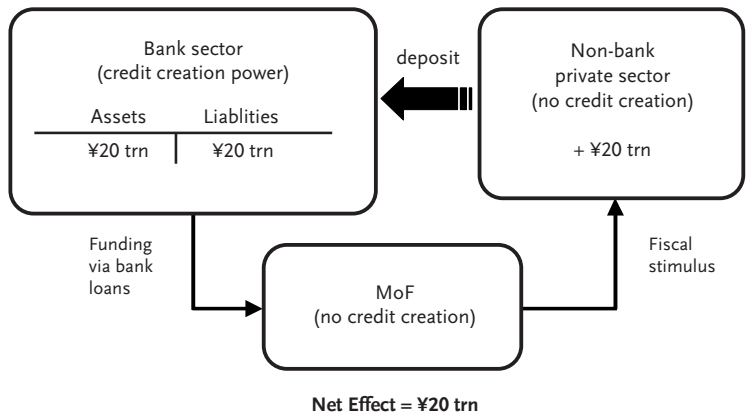
The proposed alternative model has solved the puzzles surrounding Japan's economic performance of the 1990s, including the enigma of fiscal and interest rate policy ineffectiveness. It further demonstrated that the cause of Japan's recession has been the sharp reduction in credit creation that began in 1992 and was triggered by the bad debts in the banking system. We have also found that this problem

Figure A.5 **Fiscal Stimulation Funded by Bond Issuance (e.g., ¥20 trn government spending package)**



During the 1990s, most fiscal spending was funded not through money creation, but through borrowing from the private sector. Such fiscal spending must crowd out private activity. Fiscal policy becomes a zero-sum game that merely reallocates existing resources.

Figure A.6 **Fiscal Stimulation Funded by Bank Borrowing (e.g., ¥20 trn government spending package)**



Government spending not backed by credit creation (monetization) crowds out private-sector activity. The central bank can monetize (for instance, through bond purchases), but so can the government: By shifting government funding from bond issuance to bank loan contracts, bank credit creation increases. Unlike fund raising via the capital markets, borrowing from banks will not withdraw purchasing power from other parts of the economy, as banks can create new money out of nothing.

could easily have been solved through monetary policy. Bad debts could have been taken off the banks' balance sheets without costs by the central bank. Even without bank lending, the central bank could have created a recovery a decade ago, by significantly increasing its own credit creation. In other words, Japan's recession of the 1990s has been the result of the Bank of Japan's policies.[87]

However, our research also raises a new question: If the solution to Japan's problems has been relatively straightforward and virtually costless, then why has the responsible authority not implemented such or similar policies? Incompetence is sometimes suggested. The defendant would have to build a case on ignorance of the key problem, namely, that bad debts in the banking system reduced credit creation. However, this is not easy.

First, the central bank has been competent enough to seek the good advice of leading international monetary and financial experts throughout the 1990s. Many have consistently criticized the central bank and clearly described how it could stimulate the economy. However, their advice has consistently been ignored.[88] The central bank's elaborate efforts over a decade to fend off any suggestion to increase credit creation has led many observers to the conclusion that it is making excuses to implement its predetermined policy.[89]

Second, it is apparent that key Bank of Japan staff have from early on been aware of the credit shrinkage problem, as well as the possible solutions through the central bank (see, for instance, the insightful, almost prophetic testimony by then executive director Toshihiko Fukui, *Nihon Keizai Shinbun* [1992a]). The Bank of Japan's Sawamoto and Ichikawa (1994) do not deny that the central bank could have acted, but they argue that "the basic principle is that overall monetary policy should not be turned into a bank rescue operation, except in very dire circumstances. At present, Japan is certainly not in such a situation" (p. 99). The assessment of whether circumstances are "dire" enough to warrant more aggressive monetary stimulation depends on the goal of monetary policy. There is no evidence that this goal was to stimulate growth and employment.

IV. Structural Policy

1. The New Classical View

Adherents of the real business cycle approach or similar new classical theories argue that the economy always operates at its full employment potential. The deductivist equilibrium models of this type focus on allocative efficiency within perfectly competitive markets and are defined such that any intervention disturbs that efficiency. By definition, government policies cannot boost output. Government policy should therefore focus on supply-side reforms that change the economic structure to boost the potential growth rate.

An economy such as Japan's, whose economic structure has for most of the postwar era appeared far removed from this free market ideal, has always appeared a likely candidate for such supply-side reforms. Naturally, for the first forty-five years since the war, it has been difficult to convince Japanese policymakers that the very system that outperformed its European and North American competitors in terms of growth, unemployment, and inequality measures was an obstacle to even better performance and needed to be abandoned. The experience of

the 1990s changed the picture. Japan's economy has apparently failed to respond to seemingly vigorous attempts at cyclical demand management—just as the full employment models would have predicted. The record high unemployment also does not pose an empirical problem for the full employment models. Instead, it is reinterpreted as corroboration: Since by definition unemployment could only be due to the full employment potential output level being too low, any observed unemployment is seen as proof that the economic structure is holding back the potential growth rate. The problem is those structural peculiarities of Japan's economy that one had been suspicious of for decades. The policy advice is therefore clear: Instead of cyclical stimulation, Japan needs structural reforms.

This view has been favored by U.S. trade negotiators, who have since the 1970s argued that Japan's economic structure was not only causing U.S. companies to lose market share, but was also a disadvantage to Japanese consumers and Japan's economic performance in general.[90] In Japan, it has been supported by a number of U.S.-trained economists. An example is Takenaka (1996), who argues that the "untransparent" government intervention and economic system of the postwar era is to blame for Japan's recession of the 1990s, and thus favors far-reaching structural reform, including deregulation, liberalization, privatization, and administrative reform (such as a reduction in the power of the Ministry of Finance). Similar proposals have been made by Ikeo (2001), who argues that Japan's recession is due to low productivity, which can only be raised by structural changes (while monetary easing would harm the economy).[91] As the economy failed to recover in the 1990s, more and more economists became convinced by this argument, including some proponents of cyclical stimulation policies, who agreed to place priority on the structural policy agenda.[92]

By the end of the 1990s, many critics of government policy had begun to agree with the view (formulated in Werner, 1991b, 1992, 1994b, 1995a, 1995c) that the main cause of the Japanese recession has been the bad debt problem in the banking system. However, this finding was interpreted to mean that neither fiscal nor monetary policy could work. This stimulated a number of studies that focused on the crisis in the financial system and the structural changes that it triggered or necessitated.[93] The structural reform view also found support among finance experts that consider banks not as special but merely as financial intermediaries. In this view, even if banks shut down for all practical purposes, investors should be able to raise funds in the capital markets. Thus a credit crunch or imperfect substitutability of bank funding with other forms of financing is thought to demonstrate that the capital market structure is not efficient enough.[94] Hoshi and Kashyap (2000), for instance, advise Japan to "fully open the markets now, most importantly to foreign financial institutions." This argument not only ignores the reality that small firms depend on bank financing in most countries, but the more fundamental fact that capital market financing can never be a substitute for bank lending in a macroeconomic sense, since the latter creates new purchasing power, but the former merely reallocates it.

The most consistent proponent of the structural reform view in Japan, however, has been the Bank of Japan and its staff. The reports by commissions headed by former key Bank of Japan governors, namely, the Sasaki report of 1983 and the Maekawa reports of 1986 and 1987, attracted much attention. They reiterat-

ed many of the views of U.S. trade negotiators. Somewhat less known, though closely resembling their content, are the frequent statements made by past or present Bank of Japan staff during the 1990s. Their speeches and statements are remarkably consistent in pointing out that the central bank has done all it could, and that instead it was up to the government to implement far-reaching structural reform.[95] Governor Hayami has argued frequently that the alleged ineffectiveness of fiscal and monetary policy provided evidence for the necessity of structural changes.[96] Deputies and colleagues have echoed this sentiment.[97] Bank of Japan spokesmen have not been shy to make detailed suggestions for "needed" structural reforms.[98]

This view has become the consensus view, adopted by the Koizumi administration. Accordingly, fiscal stimulation was scaled back and a less interventionist view of monetary policy taken. The key policy initiatives of the government have centered on a program of structural supply-side reform, including deregulation, liberalization, privatization, and institutional reforms to increase the influence of shareholders and reduce that of employees and civil servants. Given the high popularity rating of the Koizumi administration during much of its first year, as well as the calls by the media for "badly needed" reforms, it can be said that there is a consensus that cyclical policies have failed and structural policies are needed.[99]

2. Evidence for the Structural Change View

Let us first consider the short-term evidence for the structural reform view. The Koizumi government is not the first to shift emphasis from cyclical to structural policies: The Hashimoto administration also argued that structural issues were the cause of the recession. In 1997, it tightened fiscal policy and deemphasized monetary policy, while implementing structural reforms, including granting the Bank of Japan legal independence from the government, dismantling the Ōkurashō (Ministry of Finance), establishing an independent Financial Supervisory Agency, and rendering key government agencies directly responsible to the prime minister. The reforms also included a sweeping financial sector deregulation program (Big Bang), beginning in 1998.[100] Given the extent of structural reforms, by the end of the decade even reform proponents referred to them as "remarkable."[101] Despite the Hashimoto administration's structural reforms, they were not followed by improved economic performance. To the contrary, *before* the reforms, in 1996, growth recorded 4 percent. The 1997 reforms were immediately followed by the largest postwar contraction of nominal GDP and consumer prices. In early 2002, the economic outlook was once again everything but rosy. Thus it is difficult to dismiss the 1997–98 downturn as a temporary phenomenon.

Second, considering the long-term evidence about the link between economic structure and performance, most observers would agree that since the 1950s, Japan's economic structure has slowly but steadily deregulated and liberalized. Particularly since the 1980s, reforms have become pronounced. The number of cartels, for instance, has dropped from over 1000 in the early 1960s, to close to zero by the mid-1990s. Meanwhile, we also notice that the trend of nominal GDP growth since the 1950s has been declining. An economic structure that

was far more regulated and still closely resembled the controlled economy of the wartime era produced mostly double-digit growth in the 1950s and 1960s. As deregulation increased, growth dropped steadily, culminating in negative growth in the era of "remarkable" deregulation of the 1990s. A time series regression of growth and cartels (or other indicators of the former lack of "free markets") would probably yield a positive correlation.

Third, considering international evidence, where the United States and the United Kingdom serve as role models of deregulated and liberalized economies, it is apparent that these economies still suffered from business cycles that can be explained with cyclical, demand-based models. This shows that new classical or supply-side arguments are insufficient. Finally, a comparison of the long-term macroeconomic performance of the German, Japanese, and Korean economies in the twentieth century suggests that economic structures that do not conform to the U.S./U.K. model can be highly successful, or surpass the U.S./U.K. model, especially when measured by certain indicators of social welfare (such as indicators of inequality, social stability, or basic needs, including access to health services, welfare, and education).

We must conclude that changes in the economic structure cannot explain Japan's postwar GDP growth rate. If anything, structural reform toward deregulation and liberalization has been accompanied by reduced economic growth, both in the short term and in the long run. Most economists would therefore prefer to analyze cyclical and structural issues separately. However, the Bank of Japan has raised the intriguing idea that there is a link between cyclical and structural policies (see chapter 14).

Notes

Notes to Preface

1. As we will see, it was used by Hjalmar Schacht in the 1930s and is used frequently by developing countries. I have recommended this to the Japanese government for years. See, for instance, Werner (1994b, 1998b, 2000a, 2002b, 2002d, Appendix).
2. For an introductory economics textbook that explains this, see Dornbusch and Fischer (1987), p. 584.
3. As we will see, whether quantitative easing weakens the yen depends also on the quantitative policies of other central banks.
4. Suicides rose to 31,755 in 1998 (National Police Agency). On the link to the recession, see Tett (2000a) and Tett (2000b), p. 13.
5. Gillian Tett reported in the *Financial Times* on BoJ Governor Hayami: "Mr. Hayami fears that if he loosens policy too quickly, it would remove the pressure for reform." (Tett [2001]).
6. Okina (1999), p. 181.
7. Posen (2000), p. 22.
8. Hoshi and Patrick (2000) argue: "The magnitude of the transformation is remarkable" p. 1.
9. For a detailed analysis of the operations of the FSA, who dominates it and why it has contributed to prolonging Japan's recession, see the book by Satoshi Higashitani (2000).
10. Dawkins (1997a).
11. Dawkins (1997b).
12. See, for instance, "Japan Association of Corporate Execs Names Three New Vice Chairmen," March 2, 2001, *Kyodo*, as reported by Dow Jones (2001a) or the *Daily Yomiuri*, March 2, 2001; *Japan Times* (2001); *Economist* (1999).
13. Ibison (2002).
14. Otsuma (2002).
15. Ibid.
16. Personal interview with Toshihiko Fukui on 4 November 2002 in Tokyo.

Notes to Chapter 1

1. This explains why many studies of the Japanese model have failed to provide hard evidence that government intervention has been successful. These studies focused on specific micropolicies in specific sectors and within the given

institutional framework. They neglected to consider the influence of government policies that shaped the market structures in the first place.

2. Neoclassical economics, assuming perfect information, sees no role for monetary factors, let alone banks in the economy. An increasing body of literature is challenging this approach. However, even the growing number of studies on the "credit channel" of monetary transmission fail to recognize the special nature of banks as creators of money. Bernanke (1993), an economist with deep insights into the role of bank credit, defines credit creation as "the process by which saving is channeled to alternative uses," thus not indicating that banks are not merely intermediaries channeling savings, but creators of new money, which can be invested, thus producing new savings.

Notes to Chapter 2

1. Johnson (1982) is an early and influential study that spells out the remarkable continuity between the war and postwar eras. So does the insightful and important work by T. Nakamura (for instance, 1974, 1993, 1995). The study with the clearest such message early on was probably Sakakibara and Noguchi (1977). Also full of insights about the continuity is Morishima (1982). The readable and influential work by van Wolferen (1989) also emphasizes the continuity and did much to draw attention to this issue. An excellent summary and interpretation is provided by Dower (1993). In the 1990s, such accounts have become far more frequent, as cited below.

2. Pure free market capitalism is a rare phenomenon. Even today's America cannot be considered an example, given the existence of an interventionist central bank and substantial military expenditures supporting research and development in important industries. The tradition of government intervention is of course a long one in Japan, going back beyond the Meiji period, where government intervention was significant, to the Edo period's feudal system. We are, however, comparing the Japan of the Taisho period and early Showa period with the postwar era. A contrast is real.

3. In 1950, individuals still accounted for 61.3 percent of all shareholdings (Zenkoku Shōken Torihikisho Kyōgikai [Share Distribution Survey]). This was after the expropriation of the *zaibatsu* families, whose holding companies in 1947 owned about 40 percent of all outstanding shares. This suggests that individual share ownership must have been substantially higher than 60 percent in the 1920s. T. Nakamura (1995), Okazaki (1992).

4. Kobayashi et al. (1995).

5. Teranishi (1982), Kobayashi et al. (1995).

6. The sections above and below draw for data and insight especially on Werner (1999b), Nakamura (1993a, 1993b; 1995), Teranishi (1993), Okazaki (1987, 1988, 1992, 1993), Noguchi (1995), Kobayashi et al. (1995), Sakudo and Shiba (1993), Okazaki and Okuno (1993), and Odagiri (1992). For an analytical overview, see Arisawa (1994), Yamamura (1997), Werner (1999b), or Okazaki and Okuno-Fujiwara (1999).

7. Okazaki (1992).

8. Ibid.

9. The average length of shareholder meetings held in June 1987 by 1,082 listed companies (70 percent of all listed companies in Japan) was twenty-nine minutes, suggesting that hardly more than straightforward approval of management proposals took place. See Odagiri (1992).

10. Even at the peak of power and control of the *zaibatsu* over the economy in 1928, the share of the nation's paid-up social capital owned by Mitsui was 6.5 percent, by Mitsubishi 4 percent, by Yasuda 2.8 percent, and by Sumitomo 1.4 percent.

11. Okazaki (1992), p. 10.

12. See Metzler (2002) for an insightful analysis of the informal pressure exerted by J. P. Morgan on the Japanese leadership for financial internationalization and maintenance of the gold standard.

13. In 1932 unemployment was 23 percent in the United States, 22 percent in the United Kingdom, 30 percent in Germany, and 6.8 percent in Japan. The Japanese economy was already recovering. United States: Mitchell (1998a), Table B2; Japan: Mitchell (1998b), Table B2; Germany and the United Kingdom: Mitchell (1998c), Table B2.

14. 1932 data. In 1931, GDP was down far sharper in the UK. See Mitchell (1998c).

15. 1931 data. By 1932, Japan's economy was recovering, thanks to policies that would also have created a recovery in the 1990s, namely, an expansion in credit creation. See Mitchell (1998c).

16. United States: Mitchell (1998a), Table J1. Real GNP growth. Japan: Mitchell (1998b), Table J1. Real GDP growth. Germany and the United Kingdom: Mitchell (1998c), Table J1. Real GDP growth.

17. See Crowley (1966), Barnhart (1987).

18. Robinson (1972) p. 8. Classical and neoclassical economics was increasingly criticized for failing to explain the problems of the day and finding appropriate solutions to them. It is essentially a static discipline, which focuses on the necessary conditions for an efficient allocation of *given* resources—how the income pie should efficiently be divided. Neoclassical economics considers a given economic framework and status quo and tries to optimize the allocation of given resources. Fundamentally, it takes a bottom-up approach, arguing that the economy is an aggregation of individuals and then deduces all its economic principles from the actions of one individual or one company. In such a framework, virtually by definition, government intervention is unnecessary and inefficient.

Many economists and thinkers, especially in Germany, had a different focus. To them, the key question was not how *given* resources should be allocated efficiently, but how the whole income pie could be made to grow faster. Classical economics, being a static discipline, failed to even ask this question, let alone find an answer. German economists, by contrast, had developed a body of theory that focused on how economic growth could be enhanced and how economies could develop quickly. Moreover, the German economists did not use unrealistic assumptions, such as the assumption that everybody has perfect information, which is crucial for classical economics. Realizing that the real world was full of inefficiencies and markets that did not clear, they found a strong case for government intervention. The most important form of government intervention they

recommended, however, was not to micromanage the economy, but to intervene in order to purposely shape and redesign institutions such that the players were given incentives that, when left alone, would result in the desired outcome. Their goal was fast overall economic growth, and they had found a solution to it. See Werner (1993).

19. Okazaki (1992).

20. See Werner (1993, 1999g, 2002c).

21. Since about 1931, the term "quasi war economy" was also popular to describe this mixture of war mobilization during what was still a time of peace on the Japanese main islands.

22. See Crowley (1966), Barnhart (1987), Nakamura (1993a).

23. Johnson (1982), p. 139.

24. Ibid.

25. Some economic historians argue that this is an important reason why in the twentieth century economic growth of the United Kingdom lagged significantly behind many of its European neighbors.

26. These sections draw on Werner (1993, 1999g) and my lecture notes for my course in economic development at Sophia University, started in April 2000.

27. Okazaki (1992).

28. In the words of a Ministry of Welfare bureaucrat in 1938: "If stockholders decide on the managerial board and on management policies and drag away the profits of the firm, then there is no doubt that the stock corporation system has a flagrant fault." He therefore advocated the design of corporations such that profits are distributed more in favor of managers, employees, and reinvestments, less in favor of stockholders. As quoted by Tetsuji Okazaki in Aoki and Dore (1994), p. 363.

29. Ibid., p. 375.

30. T. Nakamura (1995). See also Teranishi (1993).

31. In the words of the minister of state affairs and deputy minister of commerce and industry at the time, the goal was "to entrust the responsible person with full authority and freedom so that he can serve the nation and use all the experience, knowledge and skills he has gained over the years." See Tetsuji Okazaki in Aoki and Dore (1994), p. 372.

32. Johnson (1982).

33. Okazaki (1992).

34. Dower (1993), T. Nakamura (1995).

35. Teranishi (1993), as published later in Aoki and Patrick (1994).

36. O. Ito (1986).

37. In 1933, the share of manufacturing loans among total loans of ordinary banks was 22.4 percent. In March 1945, it had jumped to 51.6 percent. Teranishi (1993).

38. From 20 percent of GNP in the prewar period to less than 6 percent in 1944—though the last few percentage points were involuntary and due to the loss of shipping.

39. Teranishi (1993).

40. Tetsuji Okazaki (1992), Economic Planning Agency (1962, various issues).

41. Minami (1986), p. 14.

42. T. Nakamura (1995), p. 13.

43. "During the war a huge shift within society was carried out, and while many workers did return to fanning after the war the relative proportion of male workers within manufacturing industry started from a level of 67 percent in 1947. To revert to being a country whose economy rested on agriculture and spinning was already impossible for Japan without what would be, in effect, a big social U-turn. The foundations for Japan's postwar success were laid during the war," writes Michio Morishima (1982), p. 139.

44. The rice price became controlled early on in the era of the controlled economy, using a formula that was in place until the 1990s.

45. The question of how Japan's military and civil bureaucrats could dream up and implement a system so efficient and coherent, yet entirely different from the classic free market model and also from the previous Japanese experience, is an intriguing one. It is clear that most ideas, theories, and institutions were introduced from Germany. See Fletcher (1982), Werner (1993, 1999g, 2002c), Kerde (1999), but also van Wolferen (1989) and Fallows (1994).

Notes to Chapter 3

1. This is the phrase used about Japan in a speech by U.S. Secretary of the Army Royall in 1948. T. Nakamura (1995), p. 38.

2. Joseph C. Grew, married to the cousin of Wall Street banker John Pierpont Morgan, was ambassador to Japan from 1932 until 1942. He became undersecretary at the State Department after the war. See M. Nakamura (1992), Davis and Roberts (1996).

3. Davis and Roberts (1996).

4. However, MITI also gained oversight over trade, which before 1945 was under the aegis of the Board of Trade. On MITI, see the seminal work by Johnson (1982).

5. On the latter, see Werner (2001a).

6. In October 1946, the Temporary Materials Ordinance was enforced, similar to the wartime laws (it was repealed in 1952). In the same year the Price Control Ordinance not only revived the wartime price-fixing system, but also strengthened it through the founding of the Price Agency (which was dissolved in 1952). Johnson (1982), Nakamura (1995).

7. "All units of the army and navy were disbanded by the occupation troops, but the bureaucratic structure of the government was retained virtually untouched." Morishima (1982), p. 160.

8. Ibid., p. 18.

9. Johnson (1982), p. 41.

10. For details, see the section entitled "Postwar Careers of the 'Thought Police'" in van Wolferen (1989), p. 359, listing the impressive positions reached by former Home Ministry Thought Police officers, including membership in parliament, minister of justice, minister of education, minister of welfare, head of the metropolitan police, and so forth.

11. We will learn more about Eikichi Araki in a later chapter. He was a key Bank of Japan official during the war, then subject to war crimes investigations,

after which he became Japan's ambassador to the United States.

12. See Johnson (1982), but also Davis and Roberts (1996).

13. Kishi was prime minister from February 25, 1957, to July 19, 1960, Sato from November 9, 1964, to July 6, 1972.

14. See the highly readable Seagrave (1999) and Bix (2000).

15. Dower (1993), p. 1.

16. See also T. Nakamura (1974), Noguchi (1995), Kobayashi (1995), Kobayashi et al. (1995).

17. This is why Yukio Noguchi (1995) calls it the "1940 system" in his book on the war economy and its continuity in the postwar era.

18. For the opposition this did not mean an easy life. They were at times subjected to attacks and severe intimidation.

19. Morishima (1982), p. 162.

20. See Okazaki (1993, 1994).

21. T. Nakamura (1995), p. 26.

22. Number of exemptions from the Anti-monopoly Law as of 31 March each year, as compiled by Profit Research Center Ltd., Tokyo, www.profitresearch.co.jp from statistics by the Fair Trade Commission, Tokyo.

23. Odagiri (1992).

24. See Nakane (1970).

25. "For a worker who expects to stay with the same firm until retirement, expected lifetime utility depends primarily on how the firm prospers and grows.... Hence the survival of the company, with a minimal chance of lay-off is the first priority for any employee... . Once survival is secured, the level of a worker's lifetime utility is a function of the probability (or speed) of promotion and the wage structure. The probability of promotion, in turn, is dependent on the rate of expansion of the firm and the span of control, namely, the number of subordinates supervised by any one manager." Odagiri (1992), p. 78.

26. On cartels, see also Fingleton (1995).

27. The macroeconomic result was an overaccumulation of capital: an economy biased toward the future, neglecting the present—what economists call "dynamic inefficiency." This meant that all Japanese of the present and future generations could be better off if less was saved and invested and more was consumed at any point in time.

28. Morishima (1982).

29. T. Nakamura (1995), p. 20.

30. Dower (1993), p. 16.

31. Ibid., p. 18.

32. See, for instance, the 1945 "Draft of Labor Regulations": "The factory, by its production, becomes the arena for putting into practice the true aims of Imperial labor. The People who preserve these aims become the unifiers of labor. Superior and inferior should help each other, those who are of the same rank should co-operate and, with a fellowship as of one family, we shall combine labor and management." Quoted in Nakane (1970), p. 18.

33. Professor Arthur Stockwin, director of the Nissan Institute of Japanese Studies at Oxford University, commented, "Japanese workers have a single-minded devotion to their companies and will normally sacrifice their own

interests to promote the company interests." Stockwin (1982), p. 33. A leading Japanese sociologist explained: "The limits of individual freedom of action are fixed in such a way as to ensure that the activity of the individual will not breach group limits. Freedom is allowed only in directions allowed for in-group decisions. Action should be always for the group, not calculated in terms of the individual. Whatever the amount of one's contribution may be, it will not lead to any change in the order of rank. Gains from individual contributions are thus shared by the whole group. Loyalty toward the group forms the basis on which individual activity is carried out." Nakane (1970), p. 86.

34. Mark Metzler convinced me of this point.

35. This does not mean that there were not pockets of "forced" overconsumption, especially of items such as cars and houses, which are considered consumer durables in other countries but which in Japan for various reasons, including regulatory ones, have a drastically shorter shelf life.

36. Eckes (1992).

37. Nester (1990), p. 55.

38. For the mechanism, as well as some contemporary quotes about this episode, see Werner (1997d).

39. T. Ito (1992), pp. 191–96.

40. Yonemura and Tsukamoto (1992), p. 27.

41. T. Ito (1992), p. 191.

42. Yonemura and Tsukamoto (1992), p. 27.

43. "Tokyo succeeded in joining with 18 reservations that were tantamount to allowing Japan into the OECD without requiring it fully to undertake the obligations of membership. ... Just as it had actually strengthened its tariff barriers after joining GATT, Tokyo hardened its foreign investment laws after receiving OECD membership," writes Nester (1990), p. 55.

44. T. Ito (1992), p. 191; Itoh, Misumi, and Ichimura (1990), pp. 15–36.

45. National Conference of Stock Exchanges (1999), other issues. Figures refer to percent of market value owned by domestic individual investors.

46. Krugman (1992), p. 125.

47. Yamaichi Securities, as quoted in Odagiri (1992), p. 330.

48. Andrea Boltho of Oxford University already concluded in his insightful 1975 study that Japan's postwar performance had been based on government intervention and protection to a "much greater degree" than any Western European country, so that it "brings Japan closer to the experience of another set of countries—the centrally planned economies." He argued that this "blend of some elements common to the experience of the centrally planned economies and of others common to some market economies may provide an insight... into the country's success" (Boltho [1975], p. 189).

49. This view, once a minority view held by economic historians such as Hiromi Arisawa or Takafusa Nakamura or economists such as Yukio Noguchi, has since about 1995 (the year of publication of Noguchi's book about the "1940 system") become increasingly widely accepted.

Notes to Chapter 4

1. An otherwise recommendable university textbook on monetary economics does not offer a conclusive definition. Instead it states, "Money is difficult to define and measure." Worse, "Divergences in views about what constitutes money are likely to widen with time," the textbook predicts gloomily. Miller and VanHoose (1993), p. 59.

2. For abrief overview of relevant literature, see Goodhart (1989a) or Werner (1997d).

3. Economists called this the problem of the "velocity decline," or the "breakdown of the money demand function." It made monetary policy appear powerless. For even if the central bank manipulated the money supply, there was no guaranteed impact on GDP.

4. However, there is strong and consistent evidence against the proposition that money is neutral—and indeed that money in some way causes the movement of the economy. For a survey, see Blanchard (1990).

5. These sections, as well as much of the chapter, draw on my lecture notes for my course on money and banking, Sophia University, 1997. See also Werner (2001b).

6. The Chinese emperors also created the first paper money-driven inflation in history: After several generations, they succumbed to the temptation to create too much of the paper, which discredited paper money and brought down the system. However, it was revived later and, as Marco Polo describes, thrived under Mongolian rule and stimulated economic activity. On Chinese monetary history, see von Glahn (1995).

7. Quoted from Polo (1987), pp. 147f. There are some scholars who doubt the authenticity of Marco Polo's descriptions. However, there is no indication that his description of the monetary system is inaccurate.

8. For reasons of space we are omitting one passage about how the monetary system dealt with worn-out paper money and the conduct of sales operations: "Here is another fact well worth relating. When these papers have been so long in circulation that they are growing torn and frayed, they are brought to the mint and changed for new and fresh ones at a discount of 3 percent. And here again is an admirable practice that well deserves mention in our book: if a man wants to buy gold or silver to make his service of plate or his belts or other finery, he goes to the Khan's mint with some of these papers and gives them in payment for the gold and silver which he buys from the mint-master." Polo (1987), pp. 148f.

9. Ibid.

10. The development of the banking system is often traced to the goldsmiths, as described in our example. See an introductory economics textbook, such as Begg, Dornbusch and Fischer (1984). The creation of paper money by private actors can also be traced to the merchant banking tradition of issuing "bills of exchange." These were IOUs extended to traders or firms/craftsmen underwritten by the banker and backed with goods, such as raw material inputs for production. A company in need of inputs but not able to purchase them would obtain such credit for the specific purpose of purchasing them. While this practice was at least as important as the tradition of the goldsmith bankers, if not more import-

ant, both forms of money creation took place in private hands. See Boyer-Xambeu, Deleplace, and Gillard (1994). For expositional purposes we focus here on the goldsmith tradition as the simplest example of private credit creation.

11. "Philosopher's stone" was the name for a substance that alchemists believed could change any metal (especially mercury) into gold.

12. Proverbs 22:7.

13. There are many examples of banking houses in European history that have played an important role in funding wars, including the Medicis, the Fuggers, the Rothschilds, or the Dutch bankers who funded William of Orange's successful invasion of Britain. The literature on this subject is vast and beyond the scope of this book. See, for instance, de Roover (1963) on the Medicis, or Tracy (2002) on the Fuggers. A modern example might be the controversial role played by the BIS, an institution founded in connection with the German reparations issue, during the Second World War, when it was involved in clearing many of the international financial dealings of the "enemy" Nazi regime. See, for instance, Trepp (1993, 2000).

14. The Bank of England was a private bank founded entirely by private financiers. The German Reichsbank was, and the U.S. Federal Reserve and Japanese Bank of Japan are still half owned by the private sector, predominantly the banking community. On the Bank of England, see, for instance, Richards (1929); on the Federal Reserve, see, for instance, Krooss (1983), Rothbard (1984), Lindbergh (1923), Griffin (1994) or the forthcoming A. Meltzer (2003).

15. It may appear that banks issue deposit receipts when money is deposited. But consideling the whole economy, we find that no net new deposit receipts are issued in this case. To illustrate: Assume that the depositor brings not gold to the bank but paper money (a deposit receipt from another bank). Depositing money with a bank then simply means that the deposit receipt of one bank is exchanged for another deposit receipt from another bank. The total amount of deposit receipts does not increase. Of course, the customer may choose to obtain a different form of deposit receipt, such as a bank account statement. In that case, also no new money is created. An increase in deposit receipts (paper money) comes about only when a customer borrows money from a bank, and the bank then newly issues a deposit receipt.

16. How bank-created money explains key macroeconomic variables is shown in Werner (1991b, 1992, 1997d, 2002b [parts of the latter are reproduced in the Appendix]).

17. Another reason for many misunderstandings is the frequent focus on stocks in a static model. Money, however, comes about as a flow concept, and hence a dynamic model is required.

18. For instance, see the otherwise informative Miller and VanHoose (1993).

19. Many economists refer to the shift of corporate funding from bank loans to equity or debt issuance in the markets as "disintermediation." The argument is that greater fund-raising outside the banking system renders even credit indicators less meaningful as measures of the money supply. However, fund-raising in the markets does not create purchasing power, but merely reallocates purchasing power that already exists. This renders the labels "direct financing" for equity and debt issuance, and "indirect financing" for bank borrowing misnomers. Borrow-

ing from banks is the most direct source of financing, since banks create money and by borrowing from them, firms obtain funding directly from the creator. Financing in the markets is actually a roundabout way of obtaining funds—not from the creator, the banks, but from others who invest already created purchasing power. Any claim that a stock market can provide "leverage" is true in a macroeconomic sense only if some of the "leverage" is provided by banks—as indeed happens very often, such as in the financing of the leveraged speculative bets of hedge funds.

20. Hoppe, Hülsmann, and Block (1998).

21. Since deposit measures only show potential purchasing power, it is not surprising that the traditional "quantity theory" did not hold. Replacing the deposit measures and substituting them with credit creation should improve the accuracy of the quantity theory of money (which would really have to be relabeled the quantity theory of credit). However, even if we use credit measures, we find that in the 1980s the relationship between nominal GDP growth and credit growth weakened in many countries. This demonstrates that there is another problem with the theory. And it is indeed one that can be detected when focusing on credit as the definition of money. For we notice that in the 1980s, increasingly bank loans were used for transactions that are not counted in GDP, namely, purely speculative financial transactions. In countries such as Sweden, the United Kingdom, Japan, and Korea, bank loans to real estate speculators rose significantly. The money was invested in real estate and pushed up land prices. However, the implicit assumption in the traditional monetary theory is that money is used for transactions that are included in and thus can be represented by GDP. Real estate and land transactions are, however, not part of GDP. This then explains why the traditional quantity theory of money broke down: The money supply expanded (as bank credit expanded rapidly), but the money was not used for consumption, investment, or government spending; rather, it was used for transactions that are outside of GDP. Hence one cannot expect nominal GDP growth to rise by as much as money or credit growth. Again, deposit measures could not reveal this simple fact, which becomes obvious when using the information value provided by credit data. Credit has the advantage that we can find out specifically to which use the newly created money is being put. In Japan aggregate bank loan data has been split up into the various industrial sectors of the economy since at least 1942. Using this data, we can measure how much of the credit creation was used for transactions that are part of GDP and how much has been used for transactions outside GDP, such as loans to real estate companies, the construction sector, and financial institutions. The reason why the traditional quantity theory broke down in Japan is because in the 1980s, credit was increasingly used for non-GDP transactions—speculative real estate and stock transactions. That could not fail to drive up asset prices, but it had little impact on consumer prices. See Werner (1992, 1997d).

22. See Werner (2002b) (partly reproduced in the Appendix). Banks keep interest rates below market equilibrium, because due to the limited liability of directors, there is an almost unlimited amount of excess loan demand. Unfortunately, much of that is from highly risky loan applicants. To clear the credit market, banks would have to raise interest rates very high. This, however, would elimi-

nate the conservative, low-risk projects, because they do not earn enough returns to afford such expensive borrowing. Thus banks find it more efficient to keep interest rates artificially low, and then select the borrowers as they see fit. Economists say that the credit market is rationed. For details, see the seminal paper by Stiglitz and Weiss (1981). For a survey, see Jaffee and Stiglitz (1990).

23. Nevertheless, the accounting identities that national income equals consumption plus investment and also savings plus consumption and hence investment equals savings are always true ex post facto. However, they express no behavioral relationships and hence it should not be concluded from them that money is neutral or the banking sector does not need to be studied. Bank loans do not rise due to an increase in personal savings, reflected by higher deposits. The chain of causation starts with the creation of purchasing power by banks. Once purchasing power has been created, it then circulates, perhaps from an investor to a firm and from there on to the firm's employees. The employees may then save the money and hence pay it in as bank deposits. People can only save purchasing power that has previously been created by the banking system. Savings also do not provide a direct limit for credit extension, as that is determined by the banking sector. This, however, does not diminish the importance of savings in general. Savings are necessary in order to keep the balance between purchasing power and the amount of goods that can be purchased: If banks create additional purchasing power by extending loans and national output remains the same, then as long as people do not increase their savings, prices may rise. Investment is limited by the internal purchasing power of firms, the amount of purchasing power firms can divert from other parts of the economy, and the amount of newly created purchasing power by banks.

24. With the exception of the United States, few countries can expect their created money to be accepted abroad. Thus, especially for developing countries, a shortage of foreign exchange can become a problem. However, this should only restrict imports of needed foreign produce or technology. Foreign investment is not necessary to support domestic growth, as that can be done on the basis of domestic credit creation. See Werner (2000a, 2000b) for an application to India and Thailand.

25. For theory and evidence on all these points, see Werner (1992, 1997d), as well as Werner (2002b) (excerpted in the Appendix).

26. John Law was an early theoretician and practitioner who wanted to use the benefits of a paper money system for general economic development (Law [1720]). He was followed by German economists such as Adam Müller (Müller [1809]) and especially Georg Knapp, whose *Die staatliche Theorie des Geldes* (1905), was praised by John Maynard Keynes (1936) and had a major impact on Japanese economists and bureaucrats—both in the widely read German original and the Japanese translation published in 1922, *Kaheikokuteigakuzetsu* (Iwanami Shoten, Tokyo). For a modern version of credit-based macroeconomics, see Werner (2003a, 2003b), or the Appendix.

27. The reading lists of economics courses at leading universities, such as the London School of Economics, Oxford University, Harvard University, Massachusetts Institute of Technology, and the University of Chicago, as well as the leading universities in Japan, quickly confirm that economics has come to be al-

most synonymous with neoclassical or new classical economics. New Keynesian economics usually works within the neoclassical parameters of a moneyless barter economy. There is a growing body of literature, sometimes called the "credit view" approach, which recognizes that credit is important and has so far been neglected in the literature. However, this school still ignores the role of credit creation and continues to define banks as mere financial intermediaries. For an overview, see, for instance, Gertler (1988), Bernanke (1993), Dimsdale (1994), Bernanke and Gertler (1995). See also the Appendix and the relevant Notes to it. The few approaches that recognize the importance of credit creation include the so-called post-Keynesian economists and the Austrian school. However, their influence remains marginal.

28. Sometimes central bankers argue that they can't control the money supply. In one sense, there is much truth to this. However, they can control the total amount of purchasing power. For the technically minded, here is an explanation: Economics textbooks describe the way central banks control the money supply as follows. The central banks set a reserve requirement, which limits the amount of credit the banks can create. For instance, if the reserve requirement is one-tenth of deposits (in reality it is usually far lower), this means that 10 percent of all deposits must be deposited with the central bank. Each month, in Japan on the fifteenth, the central bank would check whether banks have fulfilled their reserve requirement. The central bank can restrict credit creation by either changing the reserve requirement or by taking cash out of the economy. It can do that by selling some of its assets to the public. The public has to pay with cash and the central bank then keeps that cash. That way, the amount of cash in circulation is reduced. Banks will also find that they have less cash available. Therefore, in order to meet their reserve requirements, they would have to call back some loans and give this money to the central bank when making their monthly reserve transfer. Credit creation would slow, and thus the economy would also cool down. Hence, theory says, the central bank controls the money supply. According to this theory, private bank credit creation would merely be an extension of central bank money creation, as many classical and neoclassical thinkers tended to argue. In that case we would not really need to analyze the behavior of banks and credit creation. Central bank money would tell us all about total credit creation in the economy. However, in reality, this textbook story does not describe how central banks operate. The key assumption is that central banks rigidly enforce reserve requirements. Little known to the public, central banks are faced with a technical problem: They cannot actually enforce the reserve requirements in the short term, as this would create large volatility in short-term interest rates, endangering the stability of the financial system. Seasonal smoothing of short-term interest rates thus implies that the central bank is not fully in control of the quantity of reserves it provides to the banking system in the call market. Thus the monetary base is likely to become an endogenous variable. However, such seasonal smoothing does not preclude independent monetary policy, as the central bank could inject money into the economy through operations outside the call market. In order to preserve the ability of the central bank to implement its monetary policy, central banks have therefore tended to rely on other policy tools and intermediary targets. Thus the short-term difficulties in enforcing the orthodox

tool of reserve requirements and control of reserve supply to the banking system have often led to a preference among central banks for direct intervention in bank credit extension via "moral suasion," as the Bank of England has done for many years until the 1970s, "encadrement," as practiced by the Bank of France or "Kreditplafondierung," as practiced by the German Reichsbank. For a central banker's view or a view sympathetic to that of the central bank, see for instance, Charles Goodhart (of the London School of Economics and a long-time adviser to the Bank of England [1989a, b, c, 1991, 1994]) or the Bank of Japan's Okina (1993a, b). The issue of money supply endogeneity vs. exogeneity is discussed in greater detail in Werner (2002b) (excerpted in the Appendix) and Werner (2003a).

Notes to Chapter 5

1. Tōyō Keizai Shinpōsha, *Economic Statistics Annual*, various issues; Bank of Japan, *Shikin junkan kanjō* (Flows of Funds Accounts), various issues. The average for 1934—36 is based on Bank of Japan, *Sangyō shikin kyōkyū (zōgen) jōkyō* (Changes in the Supply of Industrial Funds), various issues. See also Sakakibara and Noguchi (1977).

2. To name but a few, see A. Müller (1809), Knapp (1905), Hahn (1920). See also Werner (2002c).

3. See Werner (1992,1997d, 2002b) (the last of these is excerpted in the Appendix). As long as credit is used productively, the "cost" of temporarily diluting someone else's purchasing power would not be noticed in the aggregate.

4. See, for instance, Knapp (1905), published in Japanese in 1922 as *Kaheikokuteigakuzetsu* (Iwanami Shoten, Tokyo), or Hahn (1920) (published in Japanese in 1943 as *Ginkōshinyō no kokuminkeizaitekiriron* (Jitsugyō no Nihonsha, Tokyo).

5. Jefferson (1894).

6. See O. Ito (1986), Werner (2002c).

7. See Werner (2002a, c).

8. That is why they ultimately changed the Bank of Japan Law in 1942, substituting for it a new law closely modeled on Hitler's 1939 Reichsbank Law.

9. As noted above, most central banks were originally founded and to a large extent owned by private-sector banks. The Federal Reserve, still half privately owned, pays a fixed dividend to its owners. It is noticeable that even many Treasury secretaries hail from Wall Street. Having criticized Asian countries for "cronyism" and cooperation between the government and the private sector, and having argued that ailing financial institutions must not be bailed out, the reaction by the Fed and Wall Street to the collapse of the hedge fund Long-Term Capital Management in 1998 may have been instructive. Hitler nationalized the Reichsbank in 1939, and the postwar successor, the Bundesbank, was also publicly owned. The British Labor government followed suit in 1946 by nationalizing the Bank of England. With increasing public resistance to privately owned central banks, the central bankers have striven for—and largely obtained—independence from elected governments by arguing that (and supporting research that purports to show that) independence implies improved economic performance.

10. O. Ito (1986).

11. O. Ito (1986), Werner (2002c).

12. For details on Schacht's practice of credit controls, as well as the underlying theory, see Werner (2002c).

13. Internal memorandum, 1924, Reichsbank (Bundesbank-Archiv).

14. It merely was accountable to the Allied Reparation Commission, which was dominated by Wall Street banks. See, for instance, McNeil (1986). It was this commission that handpicked and appointed Schacht in 1923 as Reichsbank president against the wishes of the Reichsbank executives.

15. On Schacht's links to the Bank of Japan, and the theory and practice of "credit guidance," see Werner (2002c).

16. Bosch (1927), p. 10.

17. Dalberg (1926), H. Müller (1973).

18. Werner (2002c).

19. O. Ito (1986). One Ministry of Finance bureaucrat associated with them, Osamu Shimomura, became one of the architects of Japan's postwar high-growth era.

20. Patrick (1962), p. 33f.

21. Sakakibara and Noguchi (1977). As one of his first decisions after assuming his position as Reich Chancellor in 1933, Hitler reappointed the Reparation Commission's central banker of the 1920s. Schacht served Hitler well by providing credibility and much-needed fund-raising for the Nazi party in the years before 1933. After that, his successful credit creation policies made Hitler highly popular. But in 1939 Hitler sacked Schacht as Reichsbank president after disagreements, taking more direct control over the central bank through the new law.

22. Translations quoted from Sakakibara and Noguchi (1977), p. 100.

23. Sakakibara and Noguchi (1977), T. Nakamura (1995), Noguchi (1995).

24. Personal interview with Toshihiko Yoshino, a retired member of the Bank of Japan, November 1992.

25. H.Ueda(1987).

26. The Ministry of Finance, through the system of *maruyu* (tax-exempt savings accounts that could easily be opened in the name of fictitious persons or even pets), virtually encouraged tax evasion. If firms or individuals did not follow its wishes, it could easily threaten them by calling a tax audit. A central bank has far more subtle tools at its disposal to coerce banks to comply with its "guidance." Banks rely on the cooperation and goodwill of the central bank for their daily business. By disadvantaging some banks, the central bank could mete out punishment without the possibility of legal redress. See Werner (1999a).

27. Such as the so-called establishment laws, which define the authority of the various ministries.

28. A growing body of literature argues for the crucial role of government intervention in the financial sector to enhance economic development. See Stiglitz and Uy (1996) and Cho and Hellmann (1993) for a theoretical case, with particular reference to East Asian and Japanese economic performance. For empirical results, see World Bank (1993), a study of the East Asian "miracle" that, based on multiple contributions from researchers on many Asian countries, concluded that the policy to direct credit was an important factor contributing to strong economic performance. Wade (1990) has argued that credit allocation has been

an important contributor to Taiwanese economic success. Calder (1993) has emphasized the importance of credit allocation policies in postwar Japanese economic development. Werner (1992, 1997d) argues that credit aggregates are key for economic growth, and Werner (2002c) describes the origin of the theory and practice behind the Bank of Japan's policy of directed credit.

29. Sakakibara and Noguchi (1977), p. 109.

Notes to Chapter 6

1. "Ichimada saw in President Schacht the ideal central banker." Takita (2000).
2. Ichimada (1986), p. 38.
3. Ibid., pp. 38–39.
4. James (1998), Takita (2000), Werner (2002c).
5. The literature often misunderstands the role of the credit controls instituted through the National Financial Control Association and the Bank of Japan during the war and afterward. Most authors interpret these structures as attempts to "delegate monitoring," "which was designed to lower the risks attached to lending through the systematic delegation of monitoring." Okazaki and Okuno-Fujiwara (1999), p. 28. See also Teranishi (1994), who explains the rationale of what he calls a "syndicated loan" system. The rationale and root of the postwar main-bank system is therefore also thought to be the desire to reduce, spread or eliminate credit risk and monitor borrowers, as, for instance, Sheard (1989) and others argue. This, however, is not the case. Far simpler, the system was designed to ensure the allocation of newly created purchasing power to the priority sectors and prevent use of credit by nonpriority sectors. See Werner (2002c). The misinterpretation is due to the continued lack of understanding concerning the role of banks as creators and allocators of new purchasing power.
6. Bank of Japan (1984), as quoted by Okazaki and Okuno-Fujiwara (1999).
7. Just before the end of the war he also headed the newly created, though formally short-lived, Control Department, which allocated credit. For more on Ichimada, Schacht, and their policies, see Werner (2002c).
8. The U.S. authorities removed the securities of major *zaibatsu* group companies from the banks' vaults for sales to the public. See Tsutsui (1988), Davis and Roberts (1996).
9. Calder (1993).
10. The Reconstruction Finance Bank served a similar function as the Wartime Finance Bank. See Okazaki and Okuno-Fujiwara (1999). On the priority production system, *keisha seisan hōshiki*, see T. Nakamura (1995), p. 35.
11. Okazaki and Okuno-Fujiwara (1999), p. 32.
12. Ibid.
13. Ibid.
14. Calder (1993).
15. Ibid., p. 83.
16. Yoshino (1962).
17. Okazaki and Okuno-Fujiwara (1999).
18. Yoshino (1962) explicitly compares these measures with Schacht's policies in the early 1920s. With the Emergency Measures Law of March 1947, they were

fully implemented.

19. Metallurgische Forschungsgesellschaft m.b.H. (MeFo or Mefo for short) was a public institution that accepted munitions firms' bills of exchange, which could be discounted by the Reichsbank subsidiary Golddiskontbank, a bank founded with cooperation of the Bank of England, which also had the right to issue bank notes. See James (1998), Weitz (1997).

20. See Calder (1993), p. 80. The evidence provided by Calder contradicts his contention that the Bank of Japan did not engage in allocative direction of credit.

21. Ichimada (1986).

22. Personal interview, March 1993, with a member of the Yūshi Assenbu, who had been posted in Berlin until 1945.

23. The balance sheet of a central bank is unlike that of a company. Applying the same principles as used with companies or banks to the central bank's accounts misses the main point of its function: a central bank's liabilities are legal tender. They cannot therefore be considered liabilities, since they do not carry any servicing costs and do not need to be redeemed. A central bank will always make a profit on its asset purchases, since it obtains valuable assets for free, just as Kublai Khan did. From this it is also clear that the purpose of a central bank is never to make profits—making money is something it can literally do. Its purpose is monetary policy: the creation and allocation of purchasing power.

24. "An additional factor strengthening the leverage of the BoJ during the immediate postwar period was the large holdings of wartime government bonds by the city banks. Lacking a market for such obligations, the city banks were at the mercy of the BoJ to redeem them." Calder (1993), p. 79.

25. Yoshino (1962). See also Takita (2000) for a quote to this effect.

26. Yoshino (1962), pp. 192f.

27. Calder (1993).

28. Yoshino (1962).

29. Takita (2000), T. Nakamura (1995).

30. T. Nakamura (1995), p. 41; Takita (2000).

31. It was disbanded in January 1952 (Calder [1993]). The Dodge plan also recommended a fixed exchange rate, set at ¥360/$; see note 3, chapter 7.

32. In 1947, the Temporary Law for Credit Allocation moved the Bond Committee (Kisai Kai) to the central bank, putting it in charge of bond issuance. In 1949, the Temporary Law for Credit Allocation was rescinded, and MoF reclaimed oversight of private-sector bond issuance, which was subject to approval by its securities bureau. Calder (1993), p. 85.

33. Nihon Keizai Shinbun *(1984b)*.

34. *"Penpen kusa wo hayashite miseru"* were his words, widely reported in the press. See Ichimada (1986). However, the funding ultimately went through, not least because of Nishiyama's persistence and the press leak, which shocked most observers at the time. Other industry captains were not so lucky.

35. Nihon Keizai Shinbun *(1984b)*.

36. The Nine Point Program and Dodge's mission were two examples of Washington-directed policies favored by Ichimada, but not initiated by SCAP and only grudgingly supported by it. Another piece of evidence is Ichimada's 1951 secret mission to the United States. Officially, he traveled there to receive an honorary

doctorate from Syracuse University. An old associate later revealed, however, that the trip was arranged by the GHQ to conduct meetings with U.S. officials. The GHQ seemed to listen to his advice on many matters, such as his argument against the dissolution of the *zaibatsu* banks. See Ichimada (1986), p. 188.

37. The Policy Board was established in June 1949—the only change made to the BoJ Law of 1942 until it was scrapped in 1998. See Bank of Japan (1992). It was widely known as a "sleeping board." See Takita (2000). See also Tsutsui (1988).

38. Calder (1993).

39. Personal interview with Toshiko Yoshino, formerly of the Bank of Japan and author of internal reports on window guidance, 1992. Today, there are thirty-two branches (and sixteen subordinated local offices).

40. Since the early 1970s, window guidance has been imposed on all client institutions of the Bank of Japan—in other words, on all deposit-taking financial institutions with reserves at the Bank of Japan. Only these institutions have the power to create credit. Other financial institutions that also give out loans, such as life insurance companies or government financial institutions, do not create credit. They merely act as financial intermediaries, handing on the purchasing power received as deposits or premiums to those firms that are borrowing from them. Basically, they reallocate existing purchasing power. Therefore, the Bank of Japan has never been interested in them and never even attempted to subject them to its "window guidance" controls.

41. Originally, window guidance was referred to as *kashidashi zōkagaku kisei*, which means "loan increase regulation," or, even earlier, *kinyū no ryōteki tōsei* (quantitative monetary control).

42. Personal interviews with several former members of the Banking Department, Bank of Japan. See also Werner (1999a).

43. It was modestly adjusted in 1955, when categories A and B were given equal priority. Calder (1993).

44. Horiuchi (1993).

45. The central bank argued that its own credit controls were not for the direction of credit, but merely controlling its quantity—pure macroeconomic monetary policy. Any qualitative credit direction, it argued, should be done by government programs such as the Ministry of Finance's Fiscal Investment and Loan Program (FILP) and the government banks it funded. MITI and the Ministry of Finance hence became preoccupied with administering the dozen-odd government banks that were created in the postwar years, which were not owned or funded by the central bank. Instead, they were owned by the country and funded by FILP. Given the enormous size of FILP—often dubbed the "second budget"—but with far less interference from politicians, the ministry probably thought it had gained enough control over the economy. Given MoF's actual disinterest in getting involved in BoJ credit allocation since the late 1950s, it seems that the ministry took the bait. The central bank, on the other hand, was never concerned much with the actions of the government banks or FILP, for these institutions do not have the power to create credit, precisely because they are not client institutions of the central bank. As a result, they can only divert existing purchasing power, not create any newly. From a macroeconomic or growth perspective, they

were therefore uninteresting.

46. The 1954 abolition of the Shikin Assen Bu inside the Banking Department was partly a concession to opponents of such credit controls, but also an attempt at fending off Ministry of Finance interference. The ministry had delegated its allocation specifically to this division, and the abolition gave the Bank of Japan the argument that no such intervention was now possible—while it meanwhile continued its own window guidance credit controls.

47. A practice that continues until this day. See Werner (1999a, 2002a).

48. This point emerges from a close study of the Bank of Japan's statements concerning window guidance and interest rates, and comparing this "talk" with the reality of the actual monetary policy implementation. See, for instance, Kure (1973, 1975). It was fully confirmed in a series of interviews with Bank of Japan staff, commercial bank staff, and Ministry of Finance staff by Werner (1999a, 2002a). The Temporary Money Rates Adjustment Law, which fixed interest rates, was reintroduced in 1947 by the occupation as the Temporary Interest Money Rates Adjustment Law. It enabled the BoJ and MoF to set maximum ceilings on interest rates. They were set lower than normal, providing a further subsidy to those industries that were allowed to borrow. The law remained "temporary" until the 1980s.

49. Ichimada (1986), pp. 170f.

50. Milton Friedman has shown how such operations by the Federal Reserve are "full of sound and fury, signifying nothing," since gross purchases were 184 times as large as net purchases (1980 data). "Why all this churning? ... It generates millions of dollars of fees for the dealers involved. But what function does it have for monetary policy, and why has it occurred? ... Because the churning gives people who are involved in it a sense of importance, makes them involved in big deals... . Secondarily, it offers very good jobs to ex-officials who are hired by firms in Wall Street." (M. Friedman [1982], p. 113, p. 116).

51. It was still thirty years before experts such as Milton Friedman would call for the abolition of central bank open market desks, cutting of research staff and simplifying monetary policy while making it transparent and accountable. See M. Friedman (1982).

52. Langdon (1961).

53. *Amakudari*—ex-officials parachuting into private-sector positions—from MoF and the BoJ were fairly evenly balanced in the banking sector, so that this is unlikely to explain banking support for the BoJ side.

54. For details of the Bank of Japan's early struggle to gain independence, see Langdon (1961).

55. Ibid.

56. Ichimada was appointed as finance minister to the first Hatoyama cabinet on December 10, 1954. He was reappointed to the second Hatoyama cabinet (on March 19, 1955) and to the third (on November 22, 1955). He resigned with the entire cabinet on December 20, 1956. Ichimada was then appointed finance minister to the first Kishi cabinet (on July 10, 1957) and resigned with the entire cabinet on June 12, 1958. See Ichimada (1986).

57. This seemed surprising, since industrialists normally would appreciate flexibility in credit expansion policies and could expect a less sensitive ear from

an independent central bank. However, Keidanren is clearly dominated by big business. The voice of small firms, more dependent on bank credit, is weaker. See Langdon (1961).

58. Ibid.

59. O. Ito (1986).

60. In fact, the Chinese leadership seems to have known this for more than two millennia. The classical Chinese text on monetary theory, formulated between the fourth and third centuries B.C. "warned of the disastrous consequences of diluting the ruler's control over the wealth of society," von Glahn (1996) reports (p. 30). It stated: "If wealth issues from a single source, the state will be invincible. If wealth issues from two sources, the state's military strength will suffice to defend its borders. If wealth issues from three sources, the ruler will find it impossible to raise an army. If wealth issues from four sources, his state is doomed." The mechanism to control wealth was the government's control over the supply of money.

61. Langdon (1961).

62. Ibid.

63. See Calder (1993), p. 84.

64. Kinyū kikan shikin shingikai.

65. Already before the abolition of the Council on Financial Institutions and Fund Allocation in 1968, MoF had entrusted the BoJ with the technical details of monetary policy and has since had a negligible influence on the quantity or allocation of credit. Horiuchi (1993), p. 103.

66. Patrick (1962), p. 143.

67. Horiuchi concludes, "Throughout this period [1960–1965] the Japanese economy periodically experienced overheating and balance-of-payments deficits. The overheating was brought about by the pro-cyclical movement of the money supply which is clearly shown... Such a movement of the money supply, however, did not result from abnormal conditions of the financial markets as some officials on the BoJ staff often claimed; rather it resulted from the Bank's own excessively easy money policy." Horiuchi (1993), pp. 103f. This finding is confirmed by a credit-based macroeconomic model (Werner [1992, 1997d, 2002b]).

68. Cash reserves less net borrowings from the BoJ and the money market.

69. Personal interview with Toshihiko Yoshino, 1992.

70. N. Hayashi (1996), pp. 110–11.

71. The young BoJ officer who had to prepare the Yamaichi bailout loans was the up-and-coming Yasushi Mieno. His counterpart at the Ministry of Finance's Banking Bureau was Satoshi Sumita.

72. Remember, bond issuance, just like stock issuance, does not create new money. It can only claim already existing purchasing power. Thus, bond-funded fiscal expenditure that is not backed up by credit creation must crowd out private-sector activity. See Werner (1992, 1997d, 2002b).

73. Window guidance was reintroduced in September 1967, and in 1969 the scope was widened to include all private-sector credit creators. In April 1975 it was "abolished" again, and the BoJ claimed to accept all lending plans by banks. In June 1977 the BoJ talked of a "new procedure" that had been introduced. In June 1978, tight loan quotas were again imposed. In December 1978, the Bank

of Japan declared that tighter quantitative monetary control was necessary, because stock prices "continue to rise rapidly, city center land prices have risen sharply and there is too much money [*kane amari*] circulating in the private sector." *Nihon Keizai Shinbun* (1978), p. 1. In March 1979, the "new procedure" was abolished again. In 1979, the BoJ specifically aimed at reducing housing loans and real estate-related lending in its window guidance procedures. In 1980, continued tight window guidance forced banks to ask firms to pay back loans earlier than initially agreed. Finally, window guidance ceilings switched back to year-on-year increase in late 1980. See Werner (1999d, 2002a).

74. Nihon Keizai Shinbun *(1984b), p. 3.*

75. This is why the Bank of Japan, until this day, maintains (and publishes) detailed loan statistics, broken down into these categories. Since gaining independence, it has, however, stopped publishing the more detailed monthly series of sectoral credit data. While the BoJ claims that "[window guidance] is employed to regulate the total amount of commercial bank credit and is not a tool for the qualitative control of lending" (Pressnell [1973], p. 159), this claim has been countered by Werner (1998d, 1999a, 2002a).

76. Moreover, in the postwar era large city banks were borrowing heavily from the central bank (often called "overloan"). This rendered them even more dependent on the Bank of Japan, which used the allocation of its direct lending in support of its policy.

77. To many economists, however, this was no evidence that window guidance was truly effective. Several academics, including those employed or paid by the Bank of Japan (such as those working in its Institute for Monetary and Economic Studies), argued that window guidance was not an effective tool of monetary policy and hence is not very important. The argument is that private-sector firms managed to effectively "evade" credit controls on bank loans by simply borrowing from nonbank financial institutions that were not subject to window guidance credit ceilings. Horiuchi (1977, 1978, 1980) argues that to the extent that this happens, window guidance is not effective. Eguchi (1977, 1978), Teranishi (1982), and Shinohara and Fukuda (1982) argue to the contrary. Hoshi, Scharfstein and Singleton (1991) agree that "the imposition of window guidance on a subset of the creditors of manufacturing firms will lead to the substitution of loans from unrestricted sources for those from restricted banks"; they argue, however, that alternative sources of funding are not perfect substitutes for all potential borrowers and find evidence in support of this. However, this debate about "effectiveness," repeated later by Hoshi et al. (1991), is based on a fundamental (but common) misunderstanding concerning credit creation. Apparently those who argue that window guidance was not effective believe that credit creation by banks is equivalent to loans by other nonbank financial institutions, such as life insurers. However, a loan from a life insurance company only shifts already existing purchasing power. Loan growth of the credit creating financial institutions explains economic activity in Japan. Therefore, for the economy as a whole, the necessary and sufficient condition for "effectiveness" of window guidance is whether it succeeds in controlling the loan extension of the credit-creating institutions. All literature agrees that the Bank of Japan was successful in controlling the credit growth of those financial institutions, which were subject to window

guidance. All credit creating financial institutions were subject to window guidance. Therefore, window guidance was effective. See Werner (1999a, 2002a).

78. See, for instance, Patrick (1964), Kure (1973).

79. Reserve requirements also were a sideshow: Banks and the central bank first agreed on new lending plans; if these would push the total loan balance beyond the maximum that was possible with the given reserve requirement, then the Bank of Japan would lend the banks money (Bank of Japan loans) as was necessary, which the banks then could use as reserves.

80. Bank of Japan (1973), p. 159.

81. Bank of Japan (1975).

82. Horiuchi details how the "growth rate of the money supply attained in each quarter almost invariably corresponded exactly to the previously announced target level. It is no exaggeration to say that the BoJ seemed to be able to control the money supply at will." Listed below are the quarterly YoY percent growth targets of the money supply, announced before the beginning of the respective period, and the actually attained growth rates (the latter in brackets), beginning with Q4 1978 and ending with Q2 1982: 12 (12.2), 12 (12.3), 12(12.3), 12(11.7), 11 (11.2), 10(10.6), 10(10.1), 10 (8.4), 8 (7.8), 7 (7.6), 7 (7.9), 9 (9.6), 10 (10.6), 11 (10.6), 10 (9.2). Horiuchi (1993), p. 107.

83. If monetarism is redefined as Werner (1992, 1997d) does, then the Bank of Japan would, of course be a monetarist—namely, one who controls the quantity of credit.

84. "Until very recently the BoJ's window guidance thus led to precise control of the money supply. The tradition of monetary control through the central bank's 'window guidance' had in fact been established long before the monetarism of the 1970s." Horiuchi (1993), p. 110. So what theories are BoJ officials using? They are not using theories, but the reality of monetary policy, as shown by the equation of exchange in Werner (1992, 1997d, 2002b) and the Appendix.

85. Horiuchi (1993), p. 114.

Notes to Chapter 7

1. Shimomura's ideas were instrumental in the formulation of Prime Minister Ikeda's ambitious National Income Doubling Plan.

2. Uchino (1983).

3. The details of the decision are not clear. What is known is that Detroit bank president Joseph Dodge recommended the establishment of a single fixed exchange rate, which was set at ¥360/$ in April 1949. Unconfirmed legend has it that MacArthur made the final decision. An earlier U.S. mission had recommended a rate of between ¥270/$ and ¥300/$. The weaker yen than expected provided a continued competitive boost to Japanese exporters. See T. Nakamura (1995).

4. For an analytical model of this mechanism, as well as contemporary commentary on this phenomenon, see Werner (1997d).

5. See Uchino (1983), p. 198.

6. Window guidance at the time had been expanded to include all banks, including local banks, mutual savings banks and foreign banks. Notice the fig-

ures refer to the year-on-year change of the absolute loan increase quota, not the YoY growth rate of the loan balance. Nomura Research Institute, Tokyo. See also Horiuchi (1993), p. 109.

7. Data as compiled from official sources by the Profit Research Center Ltd., Tokyo: http://www.profitresearch.co.jp.

8. Not least of all from U.S. trade negotiators and former central bankers, such as Tadashi Sasaki's recommendations, which we will examine more closely later in this book.

9. Uchino (1983), pp. 241–42.

10. Ibid., p. 240.

11. Ibid.

12. Ibid., p. 242.

13. Sakakibara and Noguchi (1977), quote on p. 98.

14. Ibid., quote on pp. 98–99.

15. Noguchi (1995).

16. Werner (1999a, 2002a).

17. Horiuchi (1993).

Notes to Chapter 8

1. Kenneth Courtis, then at Deutsche Bank, August 1989.

2. Werner (1991a).

3. Balance of Payments statistics, Ministry of Finance. Werner (1994a).

4. For instance, Frantz and Collins (1989). An insightful and at the time very influential piece is Fallows (1989). Other books on the topic include Burstein (1988) and Murphy (1996), which provide insightful accounts of the link between America's fiscal deficits and Japanese foreign investment.

5. The definition is arbitrary: Equity holdings of less than 10 percent are usually classified as portfolio investment. Ten percent or more are usually considered direct investment.

6. Werner (1994a).

7. Ibid.

8. Estimate by R. Nagahama, Dai-Ichi Mutual Life, as quoted in *Tokyo Business Today* (1987), p. 44.

9. Ibid., p. 42. See also Kawai and Okumura (1988).

10. Werner (1994a).

11. Compare the Japanese trade balance on an (IMF) balance-of-payments basis with the MoF customs clearance basis, and many of the more obvious divergences become clear. Figures on gold and leasing transactions, as well as banks' cross-border interoffice transactions, are publicly available.

12. Tanaka (1986).

13. Incidentally, the deal was highly profitable for the Japanese Ministry of Finance, as it resold the coins at home for more than twice the price, making $3.5 billion in profits. "The leading gold analysts are unanimous in the opinion that Japan is supporting the entire global gold market," Tanaka (1986) reports.

14. Figures from the Ministry of Finance.

15. A gold futures market was established and banks and securities companies

were allowed to deal in gold over the counter. Soon financial institutions were recommending all kinds of gold-linked financial products.

16. Spindler (1984).

17. Ibid.

18. The IMF's criticism of Japan's accounting practices remained diplomatic. It demanded that changes be made by "*all* countries ... particularly those countries with the largest capital flows." IMF (1992), p. 16 (italics added).

19. Ibid.

20. A high-ranking Ministry of Finance official criticized this technique in a book published in Japanese and charged that Japan should have changed the accounting definitions in order to also count the interoffice transactions as "above the line" capital exports. See Kubota (1988), especially Chapters 1, 3, and 4.

21. The short-term capital account, reflecting mainly banks' transactions, was negative for much of the late 1980s—in other words, Japanese banks borrowed money abroad, mainly on the Eurodollar markets. So much for the alleged "capital exports" from Japan.

22. Koo (1989).

23. See Kawai and Okumura (1988). For a brief review of such models, see Werner (1991a, 1991b, 1994a).

24. Balassa and Noland (1988).

25. Balassa and Noland (1988) on portfolio investment: "Econometric models of Japanese portfolio investment that emphasize the role of interest rate differentials, exchange risk, etc., have not been particularly successful in explaining the rapid growth of capital outflows" (p. 124). Graham and Krugman (1995) on the rapid expansion of Japanese banks internationally: "At present the phenomenon remains something of a mystery" (p. 54).

26. Asian Wall Street Journal *(1990)*.

27. To give a few examples: In 1991, almost one hundred firms reduced their overseas presence, up from nine cases in 1990, Idei (1992). Toyoda Machine Works announced plans to close a machine tool plant in France, having already closed one in the United States. Hitachi announced plans to close its factory in California. Daihatsu Motor gave up car sales in the United States. Fujitsu shut down its semiconductor plant in San Diego and a fax machine factory. The international property investment and construction firms retreated hastily, with several, including EIE, soon filing for bankruptcy. The promise of Japanese jobs and "lifetime employment" faded quickly in many countries, such as the United Kingdom, which had placed high expectations on it. In 1988, Sanyo's decision to locate a plant in County Durham was hailed "an example of the region's economic regeneration through Japanese investment." On the understanding that more than 500 jobs would be "created," Sanyo had received "substantial" support from British taxpayers. By October 1992, it only employed 283 people—and, after restructuring, "significantly below 200." Tighe (1992).

28. Personal interview with member of overseas acquisitions team of a leading Japanese brokerage house, October 1992.

29. See Werner (1991a, 1991b, 1992, 1997d).

Notes to Chapter 9

1. Werner (1994a, 1994b). See also Dekle and Summers (1991).
2. Keizai Koho Center (1990). On the land issue in general, see the insightful work by Noguchi (1989, 1990a, 1990b, 1992a, 1992b).
3. See, for instance, Asako (1991), Noguchi (1989, 1990a, 1990b, 1992a, 1992b), T. Ito (1993). See also Werner (1991a, 1991b) for an overview and an early explanation of the phenomenon.
4. French and Poterba (1991).
5. Nissan, Annual Report, 1989/90.
6. The Japanese word "*zai*" means "financial," pronounced to rhyme with "high."
7. Economic Planning Agency. Now accessed at the Cabinet Office's Web site: http://www.cao.go.jp/index-e.html.
8. A fact often pointed out at the time by Kenneth Courtis, then at Deutsche Bank in Tokyo.
9. N. Hayashi (1996), p. 111.
10. "One of the chief reproaches directed at economics as an allegedly empirical science is that it can offer so few numerical 'constants,' that it has isolated so few fundamental regularities. The field of money is the chief example one can offer in rebuttal: there is perhaps no other empirical relation in economics that has been observed to recur so uniformly under so wide a variety of circumstances as the relation between substantial changes over short periods in the stock of money and in prices; the one is invariably linked with the other and is in the same direction; this uniformity is, I suspect, of the same order as many of the uniformities that form the basis of the physical sciences. And the uniformity is in more than direction. There is an extraordinary empirical stability and regularity to such magnitudes as income velocity that cannot but impress anyone who works extensively with monetary data." M. Friedman (1956), pp. 20–21. As we will see, if money is defined as credit, the statement still holds.
11. For a highly readable overview of the issues, see Johnson (1988).
12. Werner (1992, 1997d).
13. Ibid.
14. I am grateful to Prof. Emeritus Takafusa Nakamura for explaining these facts to me in detail, drawing on his wealth of knowledge. For a highly readable report on the importance of land in the late 1980s, see Cutts (1990).
15. Interviews with bank loan officers, 1991, 1992. See also Werner (1991a, 1991b, 1992, 1994a, 1997d).
16. Werner (1991b, 1992, 1997d).
17. Werner (1992, 1997d).
18. Adding up loans to the three speculative sectors, plus loans to the service and manufacturing sector, we obtain 37 percent of all bank loans. Werner (1992, 1997d).
19. Ibid.
20. Ibid.
21. Yamamuro (1996), p. 6. The lending attitude of banks is well documented in the contemporary media. For a very readable account with similar examples,

see also Wood (1992).

22. 1986–89: 5.7 percent nominal GDP growth. Economic Planning Agency database. Now accessed at the Cabinet Office's Web site: www.cao.go.jp/index-e.html.

23. Many economists, especially those employed by banks and the central bank, disputed that there has been a credit crunch in the 1990s, arguing that instead there was a lack of loan demand. However, the credit market is always in a state of excess demand (there are always some who want to borrow money, no matter what the price is) and hence quantity-rationed by banks. See Stiglitz and Weiss (1981). Moreover, there is empirical evidence that there was a credit crunch. See, for instance, Baba (1996), Matsui (1996), and Werner (1996d).

24. See Werner (1991b, 1992) for early warnings.

25. See Werner (1997d).

26. The apparent breakdown of a stable relationship between GDP and money, which puzzled economists and triggered hundreds of papers and research reports, is due to the fact that money was wrongly defined and financial transactions, which are not part of GDP, were ignored. In our model the ratio between "real circulation" credit and GDP, normally called velocity by economists, is found to be constant. For details see Werner (1997d).

27. Government of Japan, Statistics Bureau and Statistics Center, Management and Coordination Agency. Accessed at the Government of Japan's Web site: http://www.stat.go.jp/.

28. See, for instance, Boon (1989).

29. Bank of Japan and Economic Planning Agency of Japan, database. Unlike most models of Japanese foreign investment, we do not break the total up into "direct" and "portfolio" investment. For a start, the differentiation between the two categories is much less clear-cut than suggested by theory. Equity investment in foreign companies that exceeds the arbitrary threshold of 10 percent of the shares of a single foreign company is classified as "foreign direct" and equity purchases of less than 10 percent are considered "portfolio" investment. Since many companies are floated on the stock exchange, it is hard to distinguish between portfolio and foreign direct investment. There is a bigger problem, however. In a macroeconomic sense, the two forms of investment are closely connected. If one goes up, the other may go down. In other words, they are substitutes. This can easily be seen when considering the case of a Japanese firm that would like to set up a plant in Scotland (classified as "foreign direct" investment). While the decision whether or not to undertake this venture is clearly motivated by firm-specific considerations, not so the decision about how to finance the establishment of the foreign plant. The mere opening of a plant does not in itself represent a movement of international capital, since the Japanese firm may well decide to fund the venture locally in the receiver country. In this case, the "foreign direct" investment does not even enter the balance of payments as an international transaction. We are, however, interested in the cases where it did and a transfer of financial capital from Japan to the rest of the world has taken place. The decision whether to fall back on Japanese capital or local money is the result of the macroeconomic environment and, unlike the microeconomic decision about the plant location, is of interest to international monetary eco-

nomics. Why, for instance, is it that Japanese foreign investment was to a great extent paid for by money originating in Japan? If funds are taken from the total of funds available in Japan, it follows that fewer funds are available for "portfolio" investment abroad. Therefore one would expect portfolio investment and foreign direct investment to be inversely related. We also tested the proposition of perfect substitutability of both forms of foreign investment and found strong support. For details, see Werner (1994a).

30. For detailed statistical tests, see Werner (1997d).

Notes to Chapter 10

1. See, for instance, Burstein (1988), Prowse (1992), Porter (1992).

2. This was a common practice by forecasters and professional economists working for research institutes, investment banks and even the government. See, for instance, Nagatani (1996). Empirically, the short-term multiplier was estimated to range between 0.6 and 2.7 by Bryant et al. (1988). Later calculations by the IMF found that at the end of the 1990s the multiplier had become negative (IMF [1998]). This indicates that traditional models miss an important variable that determines the effectiveness of fiscal policy (namely credit creation).

3. In theory and practice. See Werner (1994b, 1995b, 1996c, 1997f, 2002c).

4. Werner (2002b) (excerpted in the the Appendix).

5. Werner (1995a).

6. Data for London and New York are from 1997, for Paris from 1994, and for Tokyo from 1999. Source: Tokyo Metropolitan Government.

7. Werner (1994b, 1994c, 1995a, 1995b, 1995c). The proposal that the Bank of Japan buy real estate (for instance in the form of real estate investment trust funds, etc.) has since been seconded by many other observers (see some of the references in the Appendix). For instance, Japan Center for Economic Research (2002).

8. Japan actually had an earlier banking crisis in 1927, partly triggered by the aftereffects of the 1923 Great Kanto earthquake. See, for instance, Nakamura (1993b).

9. Just as in the Japan of the 1980s, some of this excess credit creation was spilling over abroad in the form of foreign investment. In the 1920s, the preferred destination of the excess U.S. credit creation was Germany. Since German banks had been forced by the Reichsbank to restrict domestic credit creation, they had to become dependent on dollar imports. Just as Thailand found out in 1997, it is not wise to make your banking system dependent on short-term capital inflows, as the foreigners can reverse the flow at short notice. See Werner (1994a, 1997d).

10. See Werner (1994b, 1995a, 1995c).

11. As suggested by Werner (1994b, 1995b, 1998b, 1999h, 2000a, 2000b). See also the Appendix.

12. Tax money was actually injected into banks in early 1999. The Koizumi government proposed further tax money injections into banks in late 2002.

13. Werner (1992, 1997d).

14. Statistics from the Economic Planning Agency (EPA).

15. If not distorted, balance sheet data may provide a clue.

16. We have rendered this measure as a scaled index and called it the "Leading Liquidity Index." Courtesy of Profit Research Center Ltd., Tokyo.

17. On 19 March 2001, the Bank of Japan announced that it was switching from a policy of targeting the overnight call rate (they had already reached levels below 0.01 percent) and instead target the quantity of banks' reserve deposits with the central bank (Bank of Japan [2001]). This is commonly referred to as "quantitative easing" by observers. However, increasing bank reserves does not stimulate the economy. Moreover, the Bank of Japan has in the past reserved the term "quantitative easing" (*ryōteki kanwa*) for increases in the quantity of credit (see the interview with then BoJ executive director Toshihiko Fukui in the *Nihon Keizai Shinbun* [1992a]). Finally, the Bank of Japan's actual credit creation fell in March and April 2001. Thus what was announced on 19 March 2001 should not really be called "quantitative easing." See the Appendix.

Notes to Chapter 11

1. Testimony by Bank of Japan staff, 1992, 1993.

2. Mieno (1994), p. 6.

3. This is why the ministry has, since 1982, aimed at "fiscal reconstruction," i.e., reducing fiscal deficits. The goal was achieved, briefly, in 1991. See Ihori et al. (2000).

4. See Werner (2002b).

5. See, for instance, Bank of Japan (1988c).

6. The foreign exchange intervention statistics have been made public by the Ministry of Finance and are available on its Web site, http://www.mof.go.jp. Foreign exchange reserve balances are published monthly by the Ministry of Finance and the Bank of Japan.

7. The most common interest-based theory is the portfolio approach to the determination of exchange rates. See any textbook on international economics, such as Appleyard and Field (1992).

8. Among the many earlier formal investigations, Frankel (1984) tested monetary and portfolio balance models of exchange rate determination with not very satisfactory results. Meese and Rogoff (1983) tested whether these standard models (relying to a large extent on interest rate variables, but also others) could predict future spot rates. They could not.

9. Meese (1990), p. 132.

10. It is endogenous, not exogenous, as many economists assume. For more details, see Floyd (1969), Werner (1994a).

11. This is very similar to the monetary approach to the exchange rate determination. However, as above, an important difference is in the definition of money (i.e., credit). A model based on the credit creation differential of the central banks was proposed and tested by Werner (1995b, 1996a, 1996c). Since offshore creation of purchasing power (such as in the offshore Eurodollar market) has reached significant proportions and there are no reliable statistics on these, we are unlikely to be able to measure the total amount of new money created in any one currency correctly. However, we have a close approximation: Even offshore

credit creation is ultimately underwritten by the domestic central banks. Assuming that offshore credit creation is in similar proportion to domestic central bank credit creation, the yen-dollar exchange rate should be determined by the relative amount of credit creation of the Federal Reserve system and the Bank of Japan.

12. There is a consensus that unsterilized intervention does not affect the exchange rate in a significant way (see, for instance, Edison [1993]). Unfortunately for MoF, the BoJ had a free hand at deciding whether to sterilize or not, and mostly it did.

13. It is widely recognized that the official Japanese unemployment rate is calculated using a very restrictive formula (e.g., only one hour of employment per week implies classification as being employed, etc.). Thus in times of recession, there is a large increase in the official classification of the "nonworkforce population" and a fall in the official "workforce population." Basically, many of those who lose their jobs first when the economy moves into recession, such as part-time employees, temporary staff, and female staff in general, are reclassified and shift from workforce to nonworkforce. As a result, the official unemployment rate does not rise much, since it is defined as the unemployed workforce. It is thus clear that during the 1990s actual unemployment was far larger than official figures suggested. Using data on the movement of the workforce and nonworkforce population, a more accurate figure can be estimated. See www.profitresearch.co.jp.

14. Meetings in 1992 and 1993. Names withheld.

15. As I found out, when I was visiting researcher at the Bank of Japan's Institute for Monetary and Economic Studies in 1992/1993.

16. See, for instance, then executive director Fukui's prescient statement made in 1992: "I think that in the future the question will become important whether in a situation where financial institutions hold non-performing assets, bank behaviour will start to change completely, compared to the past—in other words, whether the behaviour of banks will differ from the past, when the Bank of Japan implements the same interest rate reductions as monetary policy, and whether the transmission mechanism of monetary policy is changing or not" (*Nihon Keizai Shinbun* [1992a]).

Notes to Chapter 12

1. See, for instance, Jittai Chōsa Shōiinkai (1959), Patrick (1962, 1964), Yoshino (1962), Kure (1973, 1975), Horiuchi (1980, 1993), Iwata and Hamada (1980), Suzuki (1974, 1986). This chapter in parts draws heavily from Werner (2002a) (copyright the East Asian Economic Association and Blackwell Publishers Ltd; I am grateful for permission to reuse).

2. One academic paper, written by an economist from the U.S. Federal Reserve system, was published in 1986 in the Bank of Japan's own journal (and stirred some interest in the local press; see *Nihon Keizai Shinbun* [1986c]). The economist had come to the Bank of Japan to study its operation of monetary policy and compare it with the U.S. central bank. Not surprisingly, for an economist using the traditional set of assumptions and preconceptions and being employed by a central bank, he concluded that the two central banks use interest

rates as their main policy instrument. Following the neoclassical theory with its assumption of perfect information, he could not see any potential role for "moral suasion" or informal policy tools to influence bank behavior and hence saw no need to actually research whether they existed or not. See Dotsey (1986), p. 105.

3. Hoshi, Scharfstein, and Singleton (1991) do consider empirical data on window guidance and bank lending. They even notice the continued close correlation between the two data series. However, they accept the official explanation by the Bank of Japan that window guidance was not strictly enforced anymore and all the banks' lending plans were accepted by the central bank. Yet, the error margin between window guidance and actual lending three months later did not widen. In other words, the quotas were adhered to at least as strictly during the 1980s as before. Hoshi et al. fail to address this issue, which casts doubt on the explanation of "voluntary" compliance and calls for the empirical exploration of alternative hypotheses, such as the possibility that window guidance in fact continued.

4. *Nihon Keizai Shinbun* (1984c); (1984e); (1985).

5. Nihon Keizai Shinbun *(1986a)*.

6. Nikkei Kinyū *(1988b)*.

7. The study argued that the relationship between the economy (nominal GDP) and credit aggregates had "weakened remarkably" compared to traditional money supply indicators, like M2+CD. For purposes of policy controllability, M2+CD had been preferable, the Bank of Japan claimed (Bank of Japan [1988c]). However, elsewhere (Bank of Japan [1988a]), the central bank argued that M2+CD was also not reliable as an intermediary policy tool. Werner (1997d) has demonstrated that credit aggregates are sufficient explanatory variables of both bubble and postbubble recession. The Bank of Japan's credit study (Bank of Japan [1988c]) suffers from two major flaws, which explain why its credit aggregates seem to fail to explain nominal GDP: firstly, credit is not disaggregated as in Werner (1994a, 1997d). The second reason is an incorrect definition of "credit." In the study, the Bank of Japan included loans by financial institutions that do not create credit in the definition of its "broad" credit aggregates. This seems disingenuous, because the Bank of Japan has never made them subject to window guidance for this very reason.

8. It continues: "Current window guidance consists of the following: the Bank collates the domestic loan plans of individual banks, clarifies its policy orientation to commercial banks, and encourages prudent planning. Each bank formulates, at its discretion, plans for domestic yen loans for the coming quarter. Impact loans and CP underwriting are not subject to window guidance. In light of the leeway and flexibility commercial banks have for adjusting credit, window guidance is, in practice, open-ended, although it may continue to be a psychological pressure. Nakao and Horii (1991), pp. 21f. Yet even the Bank of Japan's official pronouncements about the role of window guidance in the 1980s have been contradictory (usually depending on whether the report is issued in English or Japanese). A 1992 booklet, published only in Japanese, stated that "although window guidance ... is merely a supplementary tool, during times of monetary tightening it had the effect of directly limiting the loan increase amounts of financial institutions." Bank of Japan (1992), p. 31.

9. A reason why many researchers have accepted the official view without subjecting it to more rigorous scrutiny may be that they recognize that in the specific institutional setting of early postwar Japan the use of credit controls was meaningful (because in an environment of regulated interest rates, credit would become rationed; interest rates could not be used as monetary policy tool; most investors relied on bank lending for fund-raising, as both stock market and especially debt and money markets were underdeveloped; finally, capital flows were tightly regulated). However, in the 1980s, all these conditions changed and thus the economic rationale for continued window guidance clearly weakened. Liberalization of capital flows in December 1980, gradual deregulation of deposit interest rates from October 1985, increased creation of debt markets, and the introduction of more short-term money market and general open market operations by the central bank all meant that other monetary policy tools could be used by the central bank to achieve its goals, while there was the possibility that window guidance itself would become less effective in such an environment. This was often pointed out by the Bank of Japan. Needless to mention, while economic rationale for using window guidance may potentially have weakened, other, for instance, political considerations (such as the informal and secret nature of the tool) may still have provided a reason for its existence. Further, assessing the justification for its existence cannot substitute for empirically verifying whether it actually existed or not.

10. No wonder Bank of Japan Banking Department's chief, Tamura, had to emphasize in 1991 to the press that "this time" the abolition was for real and that "in the future, window guidance will under no circumstances be re-instituted." *Nihon Keizai Shinbun* (1991b).

11. Werner (1992, 1997d).

12. Indeed, a large part of what is known about pre-1980 window guidance is based on testimonies to a parliamentary subcommittee of the Diet (Jittai Chōsa Shōiinkai, 1959).

13. For details see Werner (1998d, 1999a), which contain earlier versions of parts of Werner (2002a), but are more detailed concerning the secondary and primary sources.

14. Nihon Keizai Shinbun *(1981)*.

15. Nihon Keizai Shinbun *(1982)*.

16. Nihon Keizai Shinbun *(1986d)*, Nihon Keizai Shinbun *(1986e)*.

17. Nikkei Kinyū *(1988c)*.

18. Nikkei Kinyū *(1990b)*.

19. Nikkei Kinyū *(1991a)*.

20. Nikkei Kinyū *(1991c)*.

21. One of the most useful interviews (tape-recorded) was with two Bank of Japan officials (referred to as Nos. 5 and 6) at the same time. It was not only an extremely frank and detailed interview, but the fact that two central bank eyewitnesses were present simultaneously provided an immediate consistency check. Other interviews were also in agreement. See Werner (1999a).

22. Our findings were also consistent with the only previously published insider account on the reality of the Bank of Japan's monetary policy, Ishii (1996), a book written by a former Bank of Japan window guidance officer.

23. At the time, Lotus 123 and Multiplan software was used by many BoJ staff. The window guidance was administered by the Banking Department of the Bank of Japan. There were three divisions in the Banking Department dealing with the banks. The first section dealt with the city banks, the second with the regional banks, and the third with foreign banks. One official of the first section was in charge of one or two city banks. Toward the end of the quarter, the Bank of Japan summoned the private bank representatives to its offices and announced to them the quarterly loan growth quotas in both year-on-year percentage growth and quarter-on-quarter absolute growth figures that had been decided by the Bank of Japan. For most of the time direct credit controls were imposed on yen-denominated loans, although banks also reported their impact loan plans. Only from 1987 were credit controls also imposed for non-yen (impact) loans. The banks subject to window guidance during the 1980s were all the credit creating institutions (the banks of the official "all banks" definition, namely, city banks, long-term credit banks, trust banks, regional banks, second-tier regional banks, and *shinkin* banks; plus the *nōrin chūkin*). Window guidance was never concerned with loans given out by trading houses, insurance companies, or nonbank financial institutions. It was administered at the Bank of Japan in Tokyo, as well as at the branch offices of the Bank of Japan throughout the country. The Bank of Japan headquarters provided the regional offices with an overall loan allocation quota for the various types of banks under their supervision, and the local officials then split this up into individual bank loan quotas. For further details, see Werner (1998d, 1999a, 2002a).

24. Since in the 1980s interest rates on small lot deposits (the bulk of most banks' deposits) were still regulated, banks could increase profits by increasing loan volumes. Moreover, banks were competing with each other to maintain their ranking, which is common to oligopolistic large-scale Japanese firms whose managers enjoy great freedom to pursue their own objectives—namely, scale maximization, due to cross shareholdings that reduce shareholder influence. See, for instance, Aoki and Dore (1994). Competing for ranking, even without punishment from the Bank of Japan for underutilizing their loan quota, the banks all had an incentive to fully use up their quotas.

25. It is mostly decided at the *chōsayaku* level (a managerial position). There were five *chōsayaku* in the head office Banking Department and one in each Bank of Japan branch office.

26. Due to their importance, city banks were monitored on a daily basis concerning their outstanding loans. "Not too much guidance actually takes place" in these monthly meetings, but banks provide details about their loan portfolios, about their deposits, and about their other investments in stocks and bonds (Bank of Japan official 5).

27. While the quarter-end loan growth ceilings were strictly observed, banks increased loans by higher growth rates during the quarter (*fukumigashi* or *fukumi kashidashi*, also referred to as *kamaboko*, "fish roll," as charts of bank loan growth would show curves that bulge out within quarters, before declining again at the end of the quarter). Since the quarterly allocation was only checked on the last working day of the quarter, as long as banks managed to reduce their loan books again by the time of the quarter end booking, the Bank of Japan would

not object. The Bank of Japan was entirely aware of this phenomenon and tolerated it (Bank of Japan officials 5, 6). City banks were usually subject to tighter window guidance controls, as they were given loan growth increments on both a quarter-end and quarter-average basis (the latter not published). Together with daily monitoring this means that they could not even evade window guidance in between monitoring intervals. Thus *fukumigashi* occurred among other bank types, especially the regional banks (Bank of Japan official 7).

28. The Bank of Japan announced the window guidance quota in response to direct inquiries from the general public or the media. The media sometimes chose to cover it, as we have seen above (usually when there was an anomaly or some kind of link to current events and thus "news value"). Many observers made it a custom to call up the Bank of Japan around the time of the announcement of the quota, which was at the end of the quarter, and receive the information over the telephone. The Nomura Research Institute wisely collected this crucial data, which we are using here.

29. For data on the loan market shares and bank type rankings, see Werner (2002a). The original window guidance quotas were announced in the form of quarter-on-quarter absolute increases of the outstanding loan balance. The figures differ slightly from those in Werner (2002a), because here we use the Horiuchi (1993) method for calculating the year-on-year percentage growth rates from the original quarterly level increase data. The only evidence for a structural break in 1982 was that of a potential stricter implementation of window guidance, as the error margins between quota and actual lending marginally declined—a finding not consistent with the Bank of Japan's official explanation that window guidance was relaxed or abolished. The error margin, as measured by the mean absolute percentage error between window guidance forecast of the new loan balance and actual result was 0.19% before 1982 and 0.13% afterwards. Using the resulting year-on-year growth rates, we naturally obtain a somewhat larger error margin, but a similar pattern of no rise in the margin after 1982. Hoshi, Scharfstein, and Singleton (1991) seem to believe that if a loosening and de facto abolition of window guidance had happened during the 1980s, as the BoJ claims, this should result in a closer fit between window guidance quotas and the actual bank lending observed over three months later. It is hard to follow this logic. If the threat of punishment for noncompliance before 1982 produced a certain error margin between window guidance and actual lending, then the change in procedure claimed by the Bank of Japan in 1982 must be expected to increase that error margin, as banks feel less obliged to stick to a previously agreed quota. Most of all, of course, all eyewitnesses involved with window guidance in the 1980s that we interviewed confirmed that it was a binding procedure imposed by the Bank of Japan.

30. Some sources, such as *Nikkei Kinyū* (1987d, 1987e, 1988d), seem to indicate that impact loans only became subject to window guidance several years later. There is, however, little doubt that during the bubble era, especially in the years 1987, 1988, and 1989, impact loans were also subject to window guidance. See also Werner (1998d, 1999a). As touched upon in chapter 8, the result of the surge in impact loans was that overall net long-term capital outflows as recorded in the balance of payments were understated, because impact loans were only

counted as capital inflows "above the line" in the balance of payments statistics, but not when banks made the necessary interoffice transfer to the offshore branch (a "below the line" transfer). As a result, the Japanese net long-term capital outflows as recorded in the balance of payments statistics in the 1980s are an understatement of the actual net foreign investment by Japan. See Kubota (1988).

31. The interviewees clearly considered credit controls to be not only the most effective, but also the most important tool of monetary policy used by the Bank of Japan. "Window guidance is more powerful than interest rates, more than the official discount rate because it works directly" (Bank of Japan official 5). "Normally what is done is to change the official discount rate and window guidance together as a package. This is the most popular case" (bank official 5). "Loans are the main business of banks. Thus this is the strongest regulation. Window guidance is important, because loans are a big part of the money supply.... If there are more loans then naturally, the deposits come back into the system. Since the loans have a very large effect on the money supply, their quantity decides the inflation rate" (Bank of Japan official 7).

32. Personal interviews with Bank of Japan staff, 1992 and 1993. But also Horiuchi (1993).

33. Nihon Keizai Shinbun *(1991b)*.

34. Nihon Keizai Shinbun *(1991a)*.

35. See, for instance, Hayami (2000c): "Monetary easing was a necessary condition for the emergence of the bubble, and to that extent should be held responsible. But, in our defense, I have to say that if we had tried to prevent the emergence and expansion of a bubble by monetary policy alone, we would have had to raise interest rates to levels which could not be justified because of the relatively stable prices at the time."

36. Patrick (1962), p. 182.

37. Nikkei Kinyū *(1991c)*.

38. We did notice, intriguingly, that all Bank of Japan officials had a tendency to speak about window guidance in the present tense, although the interviews took place more than a year after the official abolition.

Notes to Chapter 13

1. The Ministry of Finance's *sōryō kisei* (total volume regulation of bank lending) of 1990 caught the public attention, as it was a rare intervention by the ministry in the quantity of bank lending, but it was also administered by the Bank of Japan; more importantly, it only followed the tight window guidance policy that the Bank of Japan had already adopted much earlier, in 1988 and 1989. Once again the BoJ managed to deflect negative public attention to MoF.

2. For econometric evidence, including capital flows, see Werner (1991b, 1992, 1994a, 1997d, 2002a, 2002b).

3. *Asahi* newspaper journalist Toshihiko Shiobara has eloquently argued that the informal association of the top six banks, the so-called Rokkōkai, is an influential and effective lobby group. As far as I could ascertain, this is true, but does not include the determination of window guidance.

4. Calder (1993), p. 89.
5. Patrick (1962), p. 143.
6. Calder (1993), pp. 88f.
7. Some commentators have asked me at this juncture: "Was MoF really so dumb?" The majority of economists and experts were equally unaware of the truth about window guidance, because they believed the central bank's repeated public statements. *Gullible* is perhaps a more suitable adjective. It also must not be forgotten that in the postwar era even the MoF elite has to a great extent received training in neoclassical economics and has thus been ill-equipped to either defend the Japanese economic system against criticism from neoclassical economists or deal with the reality of credit markets, where market imperfections imply credit rationing, rendering the allegedly crucial interest rate policies of secondary importance.
8. Suzuki (1986), p. 445.
9. Nihon Keizai Shinbun *(1989f)*.
10. Nikkei Kinyū *(1989c)*.
11. This very senior witness has, at least for the time being, asked to remain anonymous; however, his testimony was tape-recorded.
12. I met Sumita twice to discuss the role of window guidance to ascertain this.
13. Another piece of evidence is *Nihon Keizai Shinbun* (1994).
14. Ibid.
15. Although there were seven in total according to the old BoJ Law, one post was reserved for a government appointee (usually from MoF).
16. See especially Davis and Roberts (1996) and Seagrave (1999), also Bix (2000), for further details on MacArthur's methods, which also turned the former war economy minister and future prime minister Nobosuke Kishi, as well as the ruling Showa emperor into staunch supporters of the United States. Kishi even sacrificed his political career when his U.S. friends asked him to push the U.S.-Japan Security Treaty through the Diet in 1960, despite severe public opposition. By having police remove opposing politicians from parliament, the treaty was ratified, though at the cost of Kishi's career. Some, however, chose suicide over the choice between collaboration and a war crimes trial operated by the victors, such as former prime minister Prince Konoe.
17. These are the words of Kōji Nakagawa, a longtime coworker at the Bank of Japan. See *Nihon Keizai Shinbun* (1988b). See also, for instance, *Nihon Keizai Shinbun* (1989c).
18. The members of the Total War Research Institute concluded that Japan would lose the war. See Inose (1986).
19. Interview by author with Toshihiko Yoshino, 1992. See also Calder (1993).
20. His close follower, ally, and chosen successor Haruo Maekawa said that Sasaki was known as a "scary person" (*kowai hito*). *Nihon Keizai Shinbun* (1988a).
21. Legend has it that Haruo Maekawa was one of the monetary officials who met General MacArthur with a suitcase full of banknotes upon his arrival in Atsugi naval airdrome on Tokyo's outskirts on 30 August 1945. Printing military currency was an easy way to impose control over a country (a method widely practiced by the Japanese army in Asia, at the cost of many Asians whose fortunes had been forcibly exchanged into a Japanese military currency that was

later declared worthless). This is why the Bank of Japan was keen to avoid it. Maekawa's mission was successful, as General MacArthur accepted Bank of Japan money and did not insist on issuing military currency. See, for instance, *Nihon Keizai Shinbun* (1989g).

22. Nihon Keizai Shinbun *(1989e)*.

23. Such loans were provided by the Bank of Japan according to Article 25 of the former Bank of Japan Law. Mieno's successor and anointed heir Toshihiko Fukui would use this technique again in 1995 and subsequent years to provide liquidity to credit associations and banks faced with sudden deposit withdrawals and to assist in winding them up. Fukui also was at the helm of the BoJ (as deputy governor) when Yamaichi Securities faced bankruptcy for a second time. The central bank refused this time around.

24. On the occasion of Mieno's appointment as official governor of the Bank of Japan in 1989, an informed *Nikkei* reporter pointed out many of the parallels between Mieno's and Sasaki's career: "Sasaki formed factions with his '*tori maki*' followers and was criticized for a closed, secretive system (for instance, by an executive director at the time). BoJ OBs ["old boys"] mutter that there is the danger that with the strong trueborn BoJ man Mieno and a lightweight deputy, the BoJ is going to be the same." *Nihon Keizai Shinbun* (1989c), p. 5.

25. Nihon Keizai Shinbun *(1988b)*.

26. Ibid.

27. Masaru Hayami had stepped in as governor when deputy Fukui and governor Matshushita had to resign in early 1998 due to a scandal. Like Maekawa and Sasaki before him, Hayami was a chairman of the Keizai Dōyūkai (Japan Association of Corporate Executives). He had joined the Bank of Japan in the same year as Mieno, and had been close to Sasaki. After that he worked in the private sector for 13 years, at trading house Nissho Iwai Corporation. Having never worked at the crucial Banking Department, it is likely that he was not part of the close circle of insiders at the Bank of Japan.

28. Nikkei Kinyū *(1988e)*.

29. It was reported in *Nihon Keizai Shinbun* (1989b) that it had "become official that Mieno will succeed Sumita, as the government said yesterday that 'the system won't change with the new cabinet.'"

30. *Nihon Keizai Shinbun* (1989a). Also, *Nihon Keizai Shinbun* (1989b), p. 1. While Mieno's appointment was already clear, the deputy governorship was unsettled. The MoF "old boys" Yoshimoto, Yamaguchi, and Yoshino were all candidates.

31. Personal interview with senior Bank of Japan official, 1998.

32. The *Nikkei Kinyū* reported on several occasions in 1988 and 1989 that the BoJ's window guidance quotas had shrunk, mainly on the basis of the YoY change of the increase quota, in line with the BoJ's quantitative tightening policy. See, for instance, *Nikkei Kinyū* (1988d, 1989a).

33. Personal interviews with senior Bank of Japan official closely familiar with Sumita's involvement in Bank of Japan policy, 1993, 1999.

34. Nikkei Kinyū *(1989d)*.

35. Nihon Keizai Shinbun *(1989b), p. 1.*

36. Ibid.

37. Nikkei Kinyū *(1987d)*.
38. Nihon Keizai Shinbun *(1989c)*.
39. Atsuo Harakawa of Meiji Life, as quoted in the *Nikkei Kinyū* (1989e).
40. Mieno said on October 3 in the Diet Budget committee that the money supply was growing strongly, and he was worried about the *kane amari* phenomenon. *Nihon Keizai Shinbun* (1986b).
41. Nihon Keizai Shinbun *(1987b)*.
42. See, for instance, Mieno (1992).
43. See, for instance, Dow Jones (2001a), *Japan Times* (2001), *Economist* (1999). For more recent quotes, see the preface.
44. As discussed in the preface, if Fukui is not appointed as governor (due to his recent outspoken refusal to reflate the economy), the likely alternative is an outsider who gives the appearance of radical change—to be "assisted" by a deputy who is Fukui's successor and the next generation prince. After five years as deputy governor, this person is then likely to become governor for another five.

Notes to Chapter 14

1. For a summary of the central bank's arguments until 1999, see the Bank of Japan's Okina (1999).
2. Bernanke (2000).
3. Hamada (2002) notes how leading economists from many countries were invited by the BoJ in 2000 to give their advice on its monetary policy. "It is a pity that [the Bank of Japan] has hardly made use of this advice" (p. 71).
4. M. Friedman (1982), p. 105.
5. See Sawamoto and Ichikawa (1994).
6. The interview is reported in *Nihon Keizai Shinbun* (1992a).
7. Yamaguchi (2001b).
8. Ibid.
9. Ibid.
10. Cato's (234–149 b.c.) phrase was, of course, *Ceterum censeo Carthaginem esse delandam*. He was convinced that Carthago posed a threat to the Roman Empire and had to be destroyed.
11. Yamaguchi (2001b).
12. Yamaguchi (2001c).
13. Yamaguchi (2000).
14. Bank of Japan (2001). A quick browse through the speeches by central bankers on the Bank of Japan's Web site alone confirms that there are literally dozens more examples of official speeches that describe the goal of the central bank's policy as achieving "sustainable growth," usually in connection with the adjective "long-term." See, for instance, Hayami (1999), which talks about actions "necessary for sustainable growth of the economy," or Matsushita's "supply-side" speech (Matsushita [1996b]), (which, incidentally, was likely scripted for him by his trueborn Bank of Japan colleagues). Or the clarification by the newly appointed Hayami in 1998: "It goes without saying that the fundamental mission of a central bank is to maintain the stability of both prices and the financial system so as to contribute to sound and sustainable growth" (Hayami [1998]). As

we will see in later chapters, this focus on "sustainable growth" is not a peculiarly Japanese ideas. In the 1990s it has become the lead slogan of central bankers worldwide, as, for instance, the title of the "International Conference on Central Banking Policies: Leading the Way towards Sustainable Economic Growth," held in May 1999 in Macao, suggests, at which BoJ deputy governor Fujiwara spoke (Fujiwara [1999]), together with central bankers from many other countries.

15. "Therefore, one of the objectives of monetary policy should be to realize noninfla-tionary sustainable economic growth from the medium- to long-term perspective. ... We should analyze and study further the future of the economy from a medium- to long-term broad perspective" (ibid., p. 8).

16. "We as the central bank should aim at price stability which supports medium to long-term sustainable growth." Hayami (2000c).

17. Mieno (1993), pp. 12f.

18. Mieno (1994), p. 10.

19. Mieno (1994), p. 12.

20. Keynes originally made this statement (Keynes [1923], chapter 3) as part of his criticism of economists who believed in the simple interpretation of the "quantity theory," the neutrality of money and hence the ineffectiveness of monetary policy—precisely the type of assertion often made by the Bank of Japan's spokesmen (see, for instance, Matsushita [1996b]).

21. Hayami (2000c).

22. Shirakawa (2001).

23. Mieno (1993).

24. Ueda (2001a), p. 3.

25. Bank of Japan (2001).

26. Hayami (2000b).

27. Hayami (2000c).

28. Shirakawa (2001), p. 10.

29. Krugman (1998b). See also Werner (1992, 1994b, 1995a, 1996b, 1997a, 1997d, 2002b).

30. Ueda (2001a), p. 3.

31. Shirakawa (2001), p. 1.

32. Okina (1999), p. 181.

33. Yamaguchi (1999), p. 5.

34. Dow Jones (2001b).

35. Gillian Tett, A hard choice for Japan, *Financial Times*, December 2, 2001.

36. See Werner (1996b, 1996c, 1996e, 2001a, 2002b).

37. Posen (2000), p. 22. Posen concludes that these are examples of a "broadly held view at the bank." So what is the policy intention of the Bank of Japan? "It is clear that 'creative destruction/ invoked and praised repeatedly in Hayami's speeches, is the motivating ideology" (p. 206).

38. Mikitani (2000).

39. Hayami (2000b), p. 8.

40. Nihon Keizai Shinbun *(1987a)*.

41. The reference to monetary policy clearly was not meant to be a reference to low interest rates. Fukui knew, just as his junior staff did, that it would have been possible to maintain low interest rates and at the same time avoid the bubble by

simply reducing the window guidance loan quotas. During the entire postwar era Japan had successfully done just that—kept interest rates artificially low and restricted bank loans. Since the price of money and its quantity are not necessarily directly related, there was no need to set high loan growth quotas. To the contrary, we have established that the high quotas were the problem, as they forced banks to lend far too much. Far lower interest rates during the 1990s did not create a bubble, because banks did not lend so much. Bank of Japan staff administering window guidance had testified that they were surprised and worried by the large window guidance loan quotas (see chapter 12). They told us that they thought with smaller quotas the entire bubble could have been prevented—even at the same low interest rates. Contemporary commentators also felt that the BoJ carried the main responsibility in the creation of the bubble. See, for instance, the statement by the BoJ Nagoya branch manager who said in 1992 that the existence of window guidance alone meant that the BoJ carried the responsibility for the creation of the bubble. *Nihon Keizai Shinbun* (1992b).

42. Mieno (1993).

43. Yamaguchi (1999), p. 4.

44. Ibid.

45. Keizai Dōyūkai (1983), translated by the Keizai Dōyūkai as "The Responsible Country for the World." For thirteen years, from May 1975 until his death in 1988, Sasaki was also chairman of the financial system research group of the Keizai Dōyūkai.

46. See also the write-up in the *Nihon Keizai Shinbun* (1983a).

47. Nihon Keizai Shinbun *(1984d)*.

48. *Nihon Keizai Shinbun* (1983b). According to the *Nikkei*, Sasaki and Hiraiwa, head of the other business group, the Keidanren, had a close personal relationship (*Nikkei Sangyō* [1985]).

49. Actually, his international credentials go further back to the war period, when he was stationed in Europe and became eyewitness to the successive capitulations of France and then all three major axis powers. Stationed in France as a young BoJ official, he moved the Bank of Japan office to Italy, when the Vichy state was set up. After two years, when American troops landed in Italy and it fell away from the axis, Maekawa fled to Berlin. He remained for almost two years, until the Soviet troops took the city and he fled again. Crossing the Soviet Union, he arrived in Japan via Siberia in 1945, just in time for the Japanese surrender.

50. Nihon Keizai Shinbun *(1984a)*.

51. Nihon Keizai Shinbun *(1989c), p. 5.*

52. A year after completion of his term, in 1985, at age seventy-four, he became special adviser to IBM Japan.

53. Members of the Advisory Group on Economic Structural Adjustment for International Harmony (*Kokusai kyōyochō no tame no keizai kōzō chōsei kinkyūkai*): Haruo Maekawa, Shoichi Akazawa, Takashi Ishihara, Ichiro Isoda, Tadanobu Usami, Yoshio Okawara, Saburo Okita, Hiroto Oyama, Hiroshi Kato, Yutaka Kosai, Goro Koyama, Mamoru Sawabe, Setsuya Tabuchi, Minoru Nagaoka, Takashi Hosomi, Isamu Miyazaki, Takashi Mukaibo (order as listed in "provisional translation").

54. This and the quotes below are from the "provisional translation" of the

report, entitled "The Report of the Advisory Group on Economic Structural Adjustment for International Harmony," April 7, 1986.

55. Isamu Miyazaki, one of Japan's most distinguished economists, and probably the most respected, told me that he did not entirely agree with the structural transformation agenda of the Maekawa reports. He felt that some of the advantages and social achievements of Japan's system should be preserved. He also felt that his dissent was the reason why he was unceremoniously replaced by someone "younger." Miyazaki made all these remarks during the discussion following my presentation on "Japanese Monetary Policy in Theory and Practice," at the Institute of Statistics, Tokyo, on 21 June 2001.

56. Personal interviews with current and former senior Bank of Japan staff, 1993–1998.

57. As quoted in Fallows (1989).

58. See *Nikkei Kinyū* (1988f).

59. Ibid.

60. Tokyo Wan Ōdan Dōrōkabushiki Kaisha.

61. *Nikkei Kinyū* (1988f).

62. Shirakawa (2001), p. 10.

63. Posen (2000).

Notes to Chapter 15

1. "In a political sense, this seems a reasonable suspicion. Virtually the only thing that has ever prompted Japanese politicians or business leaders to implement reform in recent years has been a market crisis or shortage of cash," Tett (2001) in the *Financial Times*.

2. Geneva Summit, International Press Conference of Prime Minister Junichiro Koizumi, July 22, 2001. I found this pearl on the Internet.

3. N. Hayashi (1996), p. 110.

4. This problem also existed for the Asian countries and has been highlighted in Paul Krugman's (1994) article "The Myth of Asia's Miracle." The analysis that Asia's success was based on maximizing factor inputs is correct. However, the conclusion often drawn from this, that with declining factor inputs Asia (including Japan) is now condemned to declining economic growth rates, does not follow, as we shall see below.

5. Notice that the crisis of the pay-as-you-go pension systems is not the fault of demographics, but of those who introduced such a system and squandered the excess of revenues over payouts that it produced in those years, when the demographic pyramid was healthy. If this excess had been invested wisely, as was the fiduciary duty of those responsible, then there would today be an excess of pension assets (as is the case in the fully funded Singaporean system). Thus the problem is not one of demographics, but of bad policies.

6. See, for instance, the Microeconomic Competitiveness Ranking published by the World Economic Forum (2002), where Japan ranked as number 11 in 2002, or the IMD's World Competitiveness Ranking 2002, in which Japan ranked as number 26 (International Institute for Management Development [2002]).

7. With the 23 July 1999 promulgation of the Omnibus Act to Repeal and Re-

form Cartels and other Systems exempted from the Application of the Anti-Monopoly Act under Various Laws, the number of cartels basically reached zero. For a statistical time series, see Fair Trade Commission statistics on the number of exemptions from the Anti-Monopoly Law, compiled by Profit Research Center Ltd., Tokyo. See www.profitresearch.co.jp.

8. In a landmark decision on 31 May 1996, the Tokyo High Court decided against bid-rigging involving electrical equipment installation work ordered by the Japan Sewage Works Agency (Accusation; March 6, 1995).

9. The purpose of government stockpiles is to operate a price stabilization scheme that counteracts the natural, usually climate-induced fluctuations of the domestic rice production. The government stock of domestic rice was reduced from 2 million tons in 1990 to 1.66 million tons in 1991, followed by a further reduction in official stocks to only 850,000 million tons in 1991. That was already the lowest official stock level since 1961. However, the government reduced stock piles further in 1992, to only 194,000 in 1993. This amounted to an abandoning of the counter-cyclical government stabilization scheme. The harvest was bad that year (entirely unexpected for the government's crop experts?), and a major "rice crisis" was widely covered in the media. The government could claim emergency conditions to allow the hitherto legally restricted import of foreign rice. This event weakened the bargaining power of the domestic rice farmers significantly. I have not seen any serious analysis of the government's stockpiling policy in these years. The data are from the *Shokuryō Kanri Tōkei Nenpō* published by the government's Food Agency and refer to the "rice fiscal year," starting 1 November and ending in October.

10. Figures refer to percent of market value owned by nonresident shareholders. National Conference of Stock Exchanges (1999, 2002).

11. I took the idea to count the number of articles, including a certain keyword from Noguchi (1992a), who documented the number of articles using the word "bubble," in order to show the lack of awareness of a bubble during the 1980s (while there were on average only 5 articles per year using the word "bubble" in the Nikkei newspapers between 1985 and 1989, the number reached 3,475 in 1992).

12. Source: Nikkei Needs database, Nihon Keizai Shinposha, Tokyo.

13. Miura (2000).

14. For comparative work on the Japanese/German model, see especially Dore (2000), but also Jenkinson and Mayer (1992), Corbett and Mayer (1991), Corbett (1987), and Mayer (1987).

15. But is the postal savings system not unfairly competing with banks? The truth is that unfortunately it is not competing with banks at all in the most crucial area: the loan market. Instead of privatizing the postal savings system, it should be given a banking license and allowed to create credit to be loaned to small and medium-sized firms that need money but are not getting any from private-sector banks. That would boost the economy.

16. Posen (2000), p. 206f.

17. Indeed, until April 1998, the Bank of Japan Law in Article 1 required the central bank to support government policy objectives. For most of the 1990s, governments made it clear, and backed their words with action, that their goal

was to implement cyclical stimulation of the economy. To conform to the law, the Bank of Japan was therefore legally obliged to implement stimulatory monetary policies. However, it has failed to do so.

Notes to Chapter 16

1. As some had warned. See, for instance, Werner (1991b), Reading (1992).
2. See *Financial Times* (1992, 1993, 1994), Reuters News Service (1993), *Forbes* (1992), p. 43.
3. It is noticeable that Koizumi's program of "structural reform without sacred cows" and his review of public-sector corporations excluded the Bank of Japan, visibly a vested interest and a special-status semipublic corporation.
4. Interview with high-ranking government official, September 11, 2001. Subsequently the Bank of Japan became much more explicit, voicing support for minister Heizo Takenaka's plan to increase bankruptcies and distressed asset sales, though indicating preference for the use of tax money instead of central bank credit. Takenaka's team included two former Bank of Japan staff.
5. A database search of U.S. print media using the Reuters system with the key term "credit crunch" yielded more than three thousand articles.
6. American Banker *(1993)*.
7. Data from the Board of Governors of the Federal Reserve System.
8. In December 1998, Stefan Ingves, the deputy governor of Sveriges Riksbank, the Swedish central bank, was interviewed by Japanese journalists on his experiences as one of the executives involved in the rescue program of the Swedish banking sector. Upon the question of whether there was a credit crunch during the rescue process, he replied: "There was a credit crunch if you looked at the statistics. The number of loans actually decreased for several years in a row, but most of the decrease only really seemed to happen when bad bank loans were written down on paper."
9. See Richard A. Werner, *Liquidity Watch*, October 1994 issue, Jardine Fleming Securities Ltd., Tokyo Branch.
10. See Werner (1998h).
11. Moreover, there are also many manufacturing and service companies that were not engaged in speculative activities but have come under great pressure due to the long recession and whose loans therefore have become bad debts. However, a fair proportion of these loans is likely to become recoverable once the economy turns up again. To the extent that these loans are bad debt, they merely constitute the normal bad debt margin that banks have to live with. We should not forget that banks always have some bad debts on their loan books, and this does not affect their lending activity. The bad debts due to excess real estate lending of the period 1972–74, when a smaller version of the 1980s bubble occurred in Japan, had completely disappeared from the banks' balance sheets only twenty years later, in 1992.
12. Figures for aggregate write-offs according to the Financial Services Agency, Tokyo.
13. Ibid.
14. On this episode, see, for instance, Werner (2002d).

15. T. Fukui (2002).
16. Morinaga (2002).
17. Ibid.

Notes to Chapter 17

1. See, for instance, Greenspan's (1998) Humphrey-Hawkins testimony, wherein he states, with reference to Asian economies: "That a number of foreign economies are currently experiencing difficulties is not surprising. Although many had previously realized a substantial measure of success in developing their economies, a number had leaned heavily on command-type systems rather than relying primarily on market mechanisms. This characteristic has been evident not only in their industrial sectors but in banking where government intervention is typically heavy, where long-standing personal and corporate relationships are the predominant factor in financing arrangements, and where market-based credit assessments are the exception rather than the rule. Recent events confirm that these sorts of structures are ill-suited to today's dynamic global economy, in which national economies must be capable of adapting flexibly and rapidly to changing conditions. Responses in countries currently experiencing difficulties have varied considerably. Some have reacted quickly and, in general terms, appropriately. But in others, a variety of political considerations appear to have militated against prompt and effective action. As a consequence, the risks of further adverse developments in these economies remain substantial."

2. See, for instance, Letters of Intent from the Kingdom of Thailand to the IMF (currently available on the IMF's Web site at: www.imf.org/external/country/tha/index.htm?type=23. To add insult to injury, these "letters" are made out to appear as voluntary requests by the client countries to the IMF. However, in practice it is recognized by all sides, including the IMF, that they set out the terms of IMF "conditionality" largely unilaterally imposed from Washington.

3. World Bank (1993).
4. Ibid.
5. See Werner (2000b, 2000c).
6. Chaiyasoot (1995), p. 172.
7. Werner (2000b, 2000c).
8. Werner (2000b).
9. See McKinnon and Pill (1996).
10. Chaiyasoot (1995), p. 173.
11. *IMF,* International Financial Statistics, *database.*
12. As Dornbusch and Fischer (1987) criticized in their textbook. Ironically, Fischer was the deputy managing director of the IMF by the time of the Asian crisis—and implemented the very same "policy recipe" he had earlier disapproved of.
13. The IMF had total resources of U.S. $201 billion by the end of 1997. Japan's foreign exchange reserves were U.S. $208 billion at the end of 1997. International Monetary Fund (1999).
14. See Letters of Intent (for instance, Kingdom of Thailand [1997]).

15. Polak (1997).

16. Personal interview by author of member of the IMF mission, February 1998. Name withheld.

17. See Werner (2000b, 2000c), also for further details about the Asian crisis, its impact on Thailand, and why India was not affected.

18. Stiglitz (2002), p. 209.

19. Claessens, Klingebiel, and Laeven (2001), p. 13.

20. Data: Profit Research Center, Ltd., Tokyo.

21. See, for instance, Letters of Intent from the Kingdom of Thailand to the IMF (currently available on the IMF's Web site at: www.imf.org/external/country/tha/index.htm?type=23.

22. Despite undeniable and obvious evidence, it took the IMF years to hint that it may have been wrong to oppose Dr. Mahatir's policies in Malaysia—and thus by implication forced misguided policies on Thailand, Korea, and Indonesia, as the BBC (2002) reported. However, despite this there seems no sign of a fundamental change in the IMF's approach.

23. MITI, Report on Overseas Direct Investment, 1996.

Notes to Chapter 18

1. The full text of the law is available in both English and Japanese from the Bank of Japan's Web site at www.boj.or.jp.

2. The only thing the government can do is to reject the Bank of Japan budget. However, quite unusually for Japanese practice, according to the new law, this could only be done if the Finance Minister "provide[s] a notice of rejection and the reason to the Bank, as well as to the public." Moreover, "upon receipt of the notice of rejection ... the Bank may state its opinion to the Minister, or make its opinion public." In other words: "approve the budget or else." The "or else" is no empty threat: in order to reject the Bank of Japan budget, the finance minister would have to risk a highly publicized row with the central bank. The costs in terms of lost credibility and potential reverberations across bond, currency, and stock markets in Japan and worldwide would be prohibitive. It is therefore likely that no Bank of Japan budget will ever be refused.

3. See, for instance, Matsushita (1996a).

4. Data in this section from official releases, as compiled by the Profit Research Center Ltd., Tokyo, www.profitresearch.co.jp.

5. For statistical evidence, see the Appendix or Werner (1997d).

6. Since March 2001, the Bank of Japan targets the amount of deposits by banks with the central bank, and calls this a measure of its "quantitative policy." However, increasing banks' deposits with the central bank does not in itself increase purchasing power in the economy and may thus be quite a misleading indicator of the actual stance of the central bank. The same holds true for undue focus on certain gross transactions, such as its outright purchases of government bonds. Even when an increase in these purchases is announced, this does not necessarily mean that the central bank will inject more money into the economy (as that depends on all its net transactions). For more details on its net transactions, see the regular *Japan Liquidity Watch* reports published by the

Profit Research Center, Ltd., Tokyo, www.profitresearch.co.jp.

7. See the quote of M. Friedman (1982) in chapter 14.

8. Forder (2002).

9. Acheson and Chant (1973a, 1973b), as paraphrased by Forder (2002), p. 53.

10. Ibid.; M. Friedman (1982).

11. Okina (1993b).

12. Matsushita (1996a).

13. For an excellent discussion of the issues involved with the concepts of accountability and transparency, and their connection to recent economic theory, see Forder (1998a, 2000, 2002).

14. See McCallum (1985), Meade (1978), Tobin (1980) and Bean (1983).

15. That, indeed, had always been the principle of the Japanese war and post-war system: to use targeted competition in order to find those who can best fulfill a predetermined goal. Perhaps this is the true reason why the Bank of Japan resents this system so much.

Notes to Chapter 19

1. Mieno(1994), p. 11.

2. Goldman Sachs economics research, as quoted in the insightful piece by Grant (2000).

3. Pesek (2001).

4. Ibid.

5. See, for instance, T. Barber (2001), L. Barber (2001).

6. At the time it was only eleven, as Greece had not yet joined.

7. Capie and Wood (2001).

8. Personal interview with chief economist of one of the top German banks, Germany, 1997.

9. Former chancellor Helmut Schmidt, who, together with French president Valery Giscard d'Estaing established the European Monetary System with exchange rate bands, with the ultimate aim of currency union, said: "The progress made in European integration ... corresponds to Germany's vital, long-term strategic interest in ensuring peace if our country wishes to avoid a third anti-German coalition. All Chancellors from Adenauer to Kohl have been guided by this insight. ... Compared with this essential goal, all the nitpicking about the technical details of monetary union ... is of secondary importance." Quoted in Baltensperger and Deutsche Bundesbank (1999), p. 734.

10. Thus not only is the economics of the euro suspect, but in a democracy such a *fait accompli* should also be considered politically suspect.

11. There are three so-called decision-making bodies of the ECB. The Executive Board consists of six members, headed by the president and vice president. The Governing Council consists of the six executive board members and the twelve central bank governors. The General Council consists of the president and vice president and fifteen European central bank governors (including the Swedish, Danish, and British governors). The only ECB staff that are members of all three boards are the president and vice president. For details, see www.ecb.int.

12. Christa Randzio-Plath, MEP, as quoted in Lionel Barber (1997).

13. Klaus Stern argues that it is "right" to give independence to central banks, for "never has a central bank destroyed a currency of its own volition." However, there are examples of central banks doing just that, as we see in this book. Stern (1998) p. 183. See also other contributors to Baltensperger and Deutsche Bundesbank (1999), such as Manfred Neumann, who asserts that "monetary stability cannot be maintained unless governments are prevented from gaining access to the country's money supply" (p. 275).

14. Emerson and Gros (1992).

15. For instance, the study failed to include many members of the European Union, such as Austria, Luxembourg, Portugal, Ireland, and Greece.

16. Forder (1998b).

17. Ibid.

18. See Werner (2000a, 2000b).

19. This time they were influenced—by the IMF.

20. German unemployment averaged 5.3 percent between 1975 and 1997, compared to 9.1 percent for France, 7.1 percent in Italy, and 8.7 percent in the United Kingdom. Data according to the U.S. Bureau of Labor Statistics.

21. Rudolf von Havenstein, for instance, became president of the Reichsbank in 1908 and strongly defended the principle of central bank independence. See Stern (1998).

22. In January 1939, the Reichsbank Law was changed, with the central bank renamed the Deutsche Reichsbank and made directly accountable and subordinate to the Reich government, not private shareholders or the foreign Reparations Commission. Of course, one could argue that since 1933, the Reichsbank had been closely collaborating with the German government under Adolf Hitler. Nevertheless, this collaboration was clearly voluntary, under the independent decision making by Hjalmar Schacht, who had earlier hand-picked the leader of a bankrupt, radical opposition party, the NSDAP, and supported him with all the weight of his highly respected position of influence. Schacht's introductions provided the necessary funding and his respectability the voter appeal, rendering Hitler "electable" in the eyes of many. See, for instance, Marsh (1992).

23. Marsh (1992). Article 1 of the Banking Law said "The Reichsbank is a bank independent from the Reich government."

24. Article 14 gave half of the fourteen seats on the Reichsbank's general council to foreign members from Britain, France, Italy, Belgium, America, Holland, and Switzerland. Article 19 established a commissioner for the note issue, who was required to be a foreigner. The appointment of all of the members, including the German ones, fell under the sway of the Reparations Commission and the banks that controlled it. This commission had no mandate to operate in the interest of the German people. To the contrary, its job was to efficiently extract the reparations imposed on Germany by the Treaty of Versailles. Officially the payments were to the United Kingdom and France. But Britain had been vastly indebted to U.S. Wall Street banks due to its heavy borrowing during the First World War. Thus the Reparations Commission was staffed with members from J.R Morgan and other U.S. banks and the reparations payments were dollar-denominated.

25. For details, see Werner (2002c).

26. See, for instance, Bosch (1927); Dalberg (1926); H. Müller (1973).

27. See note 22 above. For an introduction to Schacht's activities to help Hitler into power, see, for instance, Marsh (1992), Weitz (1997).

28. This is at least the case, if we believe the ECB's party line that policy is made through interest rates. While there is one short-term interest rate for all member countries, the quantity of credit creation is actually quite diverse. Measuring the quantity of credit creation of the member central banks, we find that during certain time periods, the ECB ordered credit contraction in some countries (such as Germany in 2001 and 2002), while ordering credit expansion in others (such as Ireland). These quantity decisions are never discussed explicitly in public. Like the Bank of Japan, the ECB apparently uses interest rates as the smoke screen to reduce transparency and thus obtain a free hand in the use of its true monetary policy tool, the quantity of credit, which is not normally monitored. For regular and detailed monitoring, please see the *Global Liquidity Watch* reports by the Profit Research Center Ltd., Tokyo, www.profitresearch.co.jp.

29. Carl-Ludwig Holtfrerich, in Baltensperger and Deutsche Bundesbank (1999), p. 194.

30. Stern (1998), in Deutsche Bundesbank (1998), p. 186.

31. Ibid.

32. The Bundesbank had two decision-making bodies, the Zentralbankrat, consisting of the Direktorium and the presidents of the state central banks, which decided policy; and the Direktorium, consisting of the president, vice president, and up to six other members, which was responsible for implementing this policy. While the Direktorium is suggested by the government, the presidents of the state central banks are proposed by the Bundesrat.

33. Marsh (1992).

34. For instance, in 1972, when economics and finance minister Karl Schiller correctly argued that the excessive credit creation by the United States and massive flight from the dollar should be countered by revaluing the DM, the Bundesbank under President Klasen refused. The highly popular and hitherto successful minister was forced out of the government and resigned. A year later the Bundesbank took exactly his advice.

35. As was seen with the German monetary union, the details of which the Bundesbank clearly disagreed with. With Karl-Otto Pöhl's resignation it seemed that, for once, a Bundesbank president was the one to resign as a result of a disagreement with the government, not the chancellor or finance minister.

36. The new paragraph in the Bundesbank Law says that the Bundesbank will only support the general economic policy of the government as far as this is possible given its task as part of the European System of Central Banks (ESCB).

37. Protocol No. 3 on the ESCB and the ECB, as well as the Maastricht Treaty, Article 105, says that "the primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community with a view to contributing to the achievement of the objectives of the Community as laid down in Article 2. The ESCB shall act in accordance with the principle of an open market economy with free competition, favoring an efficient allocation of resources, and

in compliance with the principles set out in Article 3a." The goals mentioned in Article 3a of the Maastricht Treaty are stable prices, healthy public finances, and general monetary conditions, as well as a sustainable current account balance. Article 2 lists as the purpose of the European Union the harmonious and balanced development of the economy; steady, noninflationary, and environmentally friendly growth; a high degree of convergence of economic performance; a high level of employment; a high degree of social security; the raising of the standard of living and quality of life; and economic and social cohesion and solidarity between member states. See http://europa.eu.int/en/record/mt/title2.html.

38. Article 107 establishes an independent and unaccountable apparatus: "When exercising the powers and carrying out the tasks and duties conferred upon them by this Treaty and the Statute of the ESCB, neither the ECB, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Community institutions or bodies, from any government of a Member State or from any other body. The Community institutions and bodies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the ECB or of the national central banks in the performance of their tasks." See http://europa.eu.int/en/record/mt/title2.html. The only rational reason I could come up with to explain the existence of these passages in the Maastricht Treaty (and thus in a treaty between parliamentary democracies) is that the authors who made the initial drafts expected some resistance against the general idea of independence and hence included excessive, even ridiculous clauses that they could then use as bargaining chips they would ultimately "concede" to drop. No such worries were necessary in the event, as the British foreign minister's statement after signing the Treaty demonstrates—he hadn't read it.

39. Article 10.4 of the Protocol (No. 18) on the Statute of the European System of Central Banks and of the European Central Bank says: "The proceedings of the meetings shall be confidential. The governing council may decide to make the outcome of its deliberations public." It does not mention the possibility of publicizing the content of the deliberations itself, only the results. See http://www.ecb.int/about/statescb.htm.

40. "I am convinced that the risks [of monetary union] can be contained, if not fully avoided, by a high degree of sustainable convergence of those countries which participate in Monetary Union, by a single monetary policy which strictly aims at price stability in the euro area as a whole, by stability-oriented economic and fiscal policies and by sound wage developments in Stage Three." There is no hint that monetary policy will aim at both price stability and stable economic growth, as the Bundesbank did. He also said that he interpreted the mentioning of the "general economic policies" of the European Union as an opportunity, but not an obligation, for the ECB to give advice. He makes no mention of active support. "Furthermore, one may argue that Article 105.1 of the Treaty gives the ESCB the opportunity, if not the obligation, to support the general economic policies in the Community also by giving appropriate advice to those responsible for these policies and that this advice should be given with a view to supporting price stability and an open market economy with free competition, favoring an efficient allocation of resources." Duisenberg (1998).

41. Since the U.S. constitution explicitly assigns the right to issue money to the government, several serious legal scholars even dispute the constitutionality of the Federal Reserve itself. This line of reasoning is also supported by well-known U.S. economists. See, for instance, the writings of the economist Murray Rothbard, members of the Austrian School of Economics, and the Ludwig von Mises Institute (http://www.mises.org).

42. Barber (2001).

43. Data compiled from official Federal Reserve statistics by the Profit Research Center Ltd., Tokyo, www.profitresearch.co.jp.

44. M. Friedman (1982), p. 118.

Notes to Chapter 20

1. Alan Greenspan, 'Gold and Economic Freedom', in: Ayn Rand (ed.), Capitalism: The unknown ideal, Signet Books, New York, 1967.

2. 'A Japanese Puzzle', Economics Focus, The Economist, 13 June 1993.

Notes to the Appendix

1. See Mikitani (2000) for estimates of the cumulative output gap from 1992 through 1998.

2. In 1998 suicides reached a record high of 31,755 (National Police Agency). In 1999, the figure rose to 33,048. Both figures are about 30 percent higher than in the early 1990s and more than twice as high as thirty years earlier. The majority is by men between the age of forty and sixty years. The Police Agency estimates that every fifth suicide is due to debts or the loss of employment.

3. "The usual counter-cyclical macroeconomic policies have not worked in Japan in the second half of the 1990s, or at least not well enough." T. Ito (2000), p. 85. "And the usual remedies for inadequate demand aren't working. Interest rates have been pushed down almost as far as they can go. ... The big public spending projects the Japanese government launches every now and then do create some jobs, but they never seem to yield enough bang for the yen: The economy keeps relapsing, while government debt keeps mounting." Paul Krugman (1998b), p. 2.

4. The former expression is from Hoshi and Patrick (2000), p. xi, the latter from Dore (2000).

5. Dornbusch and Fischer (1987) emphasize that "the distinction between selling debt to the public and selling it to the central bank is essential. The distinction between money and debt financing can be further clarified by noting that Treasury sales of securities to the central bank are referred to *as monetizing the debt*, meaning that the central bank creates (high-powered) money to finance the debt purchases" (p. 584).

6. The central bank can purchase government bonds in the secondary market one year after issuance. Economically, this is equivalent to primary market purchase. The political circumstances are different, since the government may not be able to determine the extent to which bonds are purchased by the central bank. Despite lack of legal independence, since the 1970s the central bank has independently made this decision. See our discussion of monetary policy below.

7. Indeed, the government's borrowing is another measure of the stance of fiscal policy. The following data for government borrowing and debt are from Bank of Japan publications.

8. Ito argued that the demand for money was perfectly interest-elastic and the LM curve horizontal. Since interest reductions had not stimulated investment, he argued that investment was perfectly interest-inelastic and the IS curve vertical.

9. "So far, a straight Keynesian prescription applies." T. Ito (2000), p. 102.

10. This was the most common calculation used by Japanese private-sector research institutions, as well as key government agencies. See, for instance, the Economic Planning Agency's Nagatani (1996), who argued in favor of fiscal stimulation, because "even when the ripple-on effect is zero, fiscal stimulation policy will still at least have the 'direct effect,' which is that ¥1 trillion of increase in public investment will result in a ¥1 trillion in GDP increase."

11. Ito recognizes this, but leaves the questions raised unanswered. "The question remains as to what prevented the economy from getting back on a self-sustained growth path. Was it the series of bad shocks? Or has the dynamic spillover effect of fiscal packages become smaller in the 1990s? Or was the amount of actual stimulus smaller than generally recognized?" T. Ito, 2000, p. 102. No attempts at answers follow.

12. This line of reasoning may well be in the tradition of deductivist economics, which takes little interest in empirical evidence and concludes from any gap between theory and reality that the latter needs changing, not the former. However, it defies common sense. Nevertheless, even in the absence of omniscience concerning exogenous shocks, it is possible to test hypotheses concerning the cause of potential fiscal policy ineffectiveness (see section III).

13. Ito follows Posen's (1998) recommendations and suggests further stimulation in the form of lasting income tax cuts and tax incentives to stimulate private housing investment. T. Ito (2000), pp. 103ff.

14. Moreover, the annual average of the prime lending rate declined every year during the 1990s.

15. Invoking a violated ceteris paribus definition, proponents of interest rate crowding out could argue that the fall in interest rates happened *despite* the crowding out. Again, we would be faced with the difficulty of having to isolate the exogenous shocks needed to justify the absence of interest rate rises. McKibbin (1996) engages in this exercise, making use of a multicountry structural model to endogenize shocks to the Japanese economy. Pointing out the anticipated nature of the fiscal spending packages (and their partial overstatement), he concludes: "Rather than stimulating the economy, these fiscal measures acted to further slow economic activity as well as appreciate the real exchange rate" (p. 37). In McKibbin's model, the announcement effect of fiscal stimulation occurs immediately, appreciating the exchange rate and real long-term interest rates, while the positive effect occurs later, or to a lesser extent than announced (due to overstatement of the package). However, only data through 1995 are used, thus missing much of the 400-basis-point drop in long-term interest rates over three and a half years, from about 4.7 percent in February 1995 to 0.7 percent in October 1998. It can therefore be said that many observers do not seriously entertain

the interest rate crowding-out argument.

16. The argument that debt could be paid for by noninflationary money creation cannot be handled by the type of models Krugman refers to, because due to further assumptions, including perfect information, they do not allow for the possibility of less than full employment output—or, strictly speaking, the existence of money, for that matter. With record-high unemployment and a ten-year recession in Japan, the relevance of such models is not obvious.

17. The Bank of Japan lowered the ODR ten times in the decade of the 1990s, beginning with the first reduction in July 1991, before which it stood at 6 percent. Until September 1993 it was lowered seven times, reaching 1.75 percent. The ODR was further lowered to 1.0 percent in April 1995 and to 0.5 percent in September 1995. In October 1995, the uncollateralized overnight call rate (officially declared the operational "target rate") was "guided" below the ODR for the first time. Three years later, in October 1998, the Bank of Japan lowered the call rate to a new low of 0.33 percent. In February 1999, it fell to 0.1 percent—at the time called a "zero interest rate policy." After a temporary hike in August 2000, the call rate was lowered again to 0.12 percent in March and 0.02 percent in April 2001. In September of that year, the ODR was lowered to 0.1 percent and the call rate to 0.003 percent.

18. See, for instance, the Bank of Japan's Okina (1999).

19. The Bank of Japan feels that "the power of monetary policy to affect the level of prices is currently very limited. ... Policy choices by other authorities will affect the time it will take to end deflation. ... Of course, the government has other policy options to be combined with our monetary policy." The demand side "is influenced by not only monetary policy but also by fiscal policy. ... At one extreme, the government can implement drastically expansionary fiscal measures, such as the so-called non-Ricardian fiscal policy, if it considers the cost of the current deflation to be very serious. ... Alternatively, the government can speed up its reform efforts. ... [Needed are] serious efforts at structural reforms by the government." K. Ueda (2001a).

20. Krugman is careful not to imply that he is referring to Keynes' definition of a liquidity trap. Kregel (2000) explains the differences between the definitions of Keynes and Hicks. In a strictly Keynesian sense the solution to a liquidity trap would be to peg long-term interest rates (as was done in the United States during the Second World War, when near-zero rates were recorded. See M. Friedman [1982]). Kregel argues that instead of being in a liquidity trap, Japan is in underemployment equilibrium with deficient aggregate demand.

21. Krugman's stylized model assumes, among others, identical, eternally living individuals who have the same time preference. There is no banking system and no credit. Cash is created by open market operations by the government—there is no independent central bank. There is perfect information and hence no market rationing. However, prices are sticky.

22. "The problem is ... that the full-employment real interest rate is negative. And monetary policy therefore cannot get the economy to full employment unless the central bank can convince the public that the future inflation rate will be sufficiently high to permit the negative real interest rate. That's all there is to it." Krugman (1998c).

23. High-powered money rose 25 percent from 1994 to 1997, while M2+CD grew only 11 percent; as quoted by Cargill, Hutchison and Ito (2000), p. 116.

24. The Swiss central bank briefly lowered short-term interbank rates into negative territory in early 1979. Kugler and Rich (2001).

25. Like many observers, Krugman attempts to explain the situation of interest rates already at zero; an inquiry into why they dropped so low without stimulating the economy is not his primary concern.

26. He suggests capital and credit market imperfections as a possibility, but argues that "demography seems to be the leading candidate" (Krugman [1998c]). If this is so, then why are other countries with similar demography not suffering from a liquidity trap?

27. Okina (1999).

28. "The BoJ's helplessness is particularly evident in the liquidity trap with a zero interest rate and unchanged foreign exchange expectations. Thus, Dr. Okina is perfectly right in saying that simply announcing a high inflation target (as called for by Krugman [1998a, 1998b]) would not be credible as long as the BoJ has not the means to implement it" (McKinnon [1999], p. 185f).

29. They support inflation targeting because (1) it enhances transparency and accountability; (2) the task of explaining monetary policy would become easier; (3) the parameters of the central bank's independence would be well defined: it would have operational or instrument independence, though not goal independence; (4) the imposition of an inflation target "likely would have a positive impact on financial markets and the economy as a whole" by helping to "dispel the deflationary uncertainties that prevailed at the end of the 1990s." Cargill, Hutchison, and Ito (2000), p. 133. Why the central bank nevertheless rejects the idea becomes clearer as we consider the goals of its policy, below.

30. He uses a Hicksian description of the liquidity trap, based on a horizontal LM and vertical IS curve. Moreover, an "expansion in the monetary base (it is increasing at around 9 percent) has not resulted in much increase in M2 (it is increasing at around 3 percent). A situation like this is termed a liquidity trap in Keynesian economics" (T. Ito [2000], p. 101). It is not obvious why these diverging growth rates should be unambiguous evidence in favor of the liquidity trap argument. The latter requires an increase in monetary aggregates that is not translated into greater bond holdings, and hence no fall in long-term interest rates. What the suitable actual measures of money are to represent money in IS-LM models remains subject to dispute. Moreover, the IS-LM-based definition of the liquidity trap means that zero short-term interest rates cannot be used as evidence of a liquidity trap.

31. The Bank of Japan stated in 1999 that it will maintain near-zero interest rates until "deflationary fears subside," and in 2001 it said that it will maintain them until there is no more deflation.

32. "With severe limitations on instruments to ease monetary policy, however, I fear that an announcement of the target date by which to achieve, say, zero inflation, would have either no effects on the market or be counterproductive. The market may lose confidence in a central bank announcing a hard-to-hit target." K. Ueda (2001a).

33. In Krugman's version, the ultimate causes are exogenous expectations of

declining growth in the future. Those who adopt the Hicksian IS-LM version of the liquidity trap argument are also handicapped by its static nature. We do not learn why the demand for money *became* perfectly elastic with respect to interest rates. Moreover, a perfectly interest-elastic money demand would not allow subsequent falls or rises in nominal interest rates, which however all happened during the observation period.

34. For an overview, see Blanchard (1990). For recent empirical work on the monetary determinants of nominal GDP in the Japanese case, see, for instance, Werner (1997d).

35. For a survey of the money supply exogeneity-endogeneity debate, see Jao (1989). For an important post-Keynesian view with empirical evidence, see Moore (1988). Notice that the finding that causation runs from credit to money is consistent with our framework and findings in section III. The post-Keynesian argument that high-powered money or other money measures are endogenous to credit variables is no doubt true. However, this says little about the issue of exogeneity or endogeneity of credit variables, including the central bank's credit policy. In other words, even if it is true that money is endogenous, it does not follow that central bank policy must be powerless.

36. The central bank made a U-turn with its March 19, 2001, decision to target indicators of the quantity of money. There were no obstacles to the implementation of the bond purchase targets, nor was financial sector instability increased, as the bank had previously argued. Thus the central bank has delivered empirical evidence against its earlier view.

37. The Bank of Japan is also aware of the limitations of the call rate, which "cannot exert substantial influence on corporate or household expenditures" (Okina, 1993b, p. 87), since it has to work through other, longer-term interest rates, which eventually might have some impact on the economy.

38. Iwata (1992a) also argues that the Bank of Japan is responsible for the asset price bubble of the 1980s—not because of its interest rate policy, but because of its excessive supply of high-powered money.

39. Iwata also predicted that "if the Bank of Japan does not discard its 'BoJ Theory,' then even if it does not make errors in assessing the business cycle, it is apparent that the risk is large, that henceforth there will also be economic dislocation caused by monetary policy of the type that caused the great inflation of 1973/4, or the asset price surge and collapse this time." Iwata (1992b), p. 124.

40. Okina (1993b), p. 172. Indeed, there is little the central bank does guarantee.

41. Not to give the impression that the central bank cannot do anything of use at all, Okina (1993b) points out that "over a long time period, a reduction in interest rates, through stimulation of economic activity, increases income and raises asset prices, which can be expected to increase the appetite to hold money. Through this route, the central bank can control the money supply" (p. 174).

42. Beyond seasonality, Yoshikawa concedes that the BoJ "at times ... even actively changes the interest rate during the business cycle" (Yoshikawa [1993], p. 157).

43. See Werner (1997d) for abrief overview of surveys on the "puzzle" of a velocity decline.

44. See, for instance, Morgan (1994a, 1994b).

45. The Bank of Japan unceremoniously abandoned its view of the endogeneity of the money supply on March 19, 2001, when quantitative excess reserve and bond purchase targets were introduced. This has not stopped its staff, including the governor, from continuing to argue that the money supply cannot be controlled.

46. Werner (1992, 1994b, 1995b, 1995c, 1997d, 1997f, 1998f). For more details, see Werner (2003a, 2003b).

47. See Newcomb (1885).

48. The paper money takes the form of banknotes, drafts or certificates of deposit issued by the commercial banks. Or else bills of exchange endorsed by banks. In the case of the United States, paper money was occasionally also issued by the government, but we don't consider those time periods here. We also assume that if gold is still used for transactions, during the observation period its supply remained constant and its use was stable. As a result, considering only net changes in the amount of money, gold drops out as a constant. Finally, we abstract from international transactions. All these assumptions are made for expositional purposes and can be relaxed later.

49. Sometimes it is thought that the amount of paper or bank money increases when deposits are made. This misconception is probably due to the fact that historically, paper money claimed to be some form of "certificate of deposit." But when a deposit is made, there is no net change in the amount of the total of paper and bank money (or gold holdings). On the other hand, when banks issue a loan, they book a deposit balance in the account book of the customer, who can then withdraw the money and turn it into cash at leisure, or the bank pays the loan with issuance of bank notes. In this case, the money for the loan is not transferred from any other part of the economy. It is newly created out of nothing (credit creation).

50. Bank deposits would not be an accurate measure of AM, since the definition of M in the equation of exchange (1) is the amount of money changing hands to pay for transactions during a given time period. Deposits measure the amount of money retired from circulation at any moment in time. Credit growth has the additional advantage of greater information value concerning the use money is put to, which will be necessary for the disaggregation suggested below.

51. High-powered money or reserves do not fully capture the creation of net new purchasing power by the central bank and hence may be misleading indicators. For example, a central bank can increase credit creation by purchasing U.S. Treasuries. This will not necessarily be reflected in high-powered money (the sum of cash in circulation and banks' deposits with the central bank).

52. "A large part of the daily transactions of households, firms and investors are settled by means of funds transfers and remittances between banks. In turn, banks' balances are settled across their accounts held with the Bank of Japan. In other words, the majority of transactions conducted throughout the country is eventually concentrated and settled at the Bank [of Japan]. As a result, the amount settled across the current accounts at the Bank [of Japan] totals more than ¥300 trillion per day. This means that an amount equivalent to approximately 70 percent of Japan's annual GDP is transferred each day through the

accounts at the Bank [of Japan]." Matsushita (1996a), p. 7.

53. Keynes (1930) proposed to disaggregate money by its use. By focusing on deposit aggregates as definition for M, such disaggregation was practically impossible.

54. For an overview, see Werner (1996d).

55. For examples of disequilibrium models with non-Walrasian outcomes, see, for instance, Clower (1965), Barro and Grossman (1976), Muellbauer and Portes (1978), Benassy (1986) and Quandt and Rosen (1986).

56. See also Keeton (1979). Williamson (1986) also proposes a model of credit rationing due to monitoring costs.

57. This explains why research on disequilibrium economics has yielded such promising results. As, for instance, Muellbauer and Portes (1978) have pointed out, rationing in one market implies rationing in other markets. Quantities become the most important macroeconomic variable, delivering exogenous budget constraints to any microeconomic market. In terms of the structure of economic models, this clearly favors a top-down approach, where a macro foundation is imposed on micro models.

58. To complete the model for non-GDP transactions: Their majority consists of asset market transactions. If we assume, for sake of simplicity, that the amount of assets is constant (certainly true in the case of land), then the rise (fall) in the amount of money used for asset transactions is equal to the increase (decline) in asset prices (P_F):

(8) $$\Delta T_F = \Delta P_F$$

(8′) $$\Delta M_F = \Delta P_F$$

59. For a survey on the credit crunch literature relevant to Japan and empirical evidence, see Werner (1996d), Woo (1999). See also Yoshikawa, Eto and Ike (1994), Matsui (1996).

60. Even Bernanke (1993) defines credit creation as "channeling of savings to investors." However, bank credit creates new money, which can be used for new investment, without any savings having taken place. Probably the cause of the neglect of this fact and its implications is the standard representation of the credit multiplier, which does acknowledge credit creation but presents it as a process of successive lending of already existing purchasing power: A bank receives a $100 deposit. With a 1 percent reserve requirement, it lends $99 and keeps $1. The next bank does the same, and so on until the total lent based on the $100 deposit is $9,900. Further, the way it is presented gives the impression that the process starts with the deposit. This facilitates sustaining the micro or finance view of the bank as a financial intermediary. It is more useful to present the bank credit multiplier as follows: when a bank receives a $100 deposit, it keeps $100 as deposit, and at the same time lends out the same $100 to ninety-nine different people, thus lending $9,900. Where does this one bank get the extra $9,900 from? It creates it out of nothing.

61. Okina (1993b) admits: "The Bank of Japan has in the past already shown interest in the usefulness of credit aggregates. [Here he refers to Bank of Japan (1988a), which denies the usefulness of credit aggregates.] One reason for that is because, as touched upon in chapter 4 [of Okina, 1993b], the view is also in-

fluential that not money but credit exerts influence on the economy. Therefore analysis on the subject of credit aggregates is in the future also necessary" (p. 171). Okina recognizes that credit aggregates have lead-time over money supply aggregates. However, he argues that they are not practical, because observers can only receive credit information far too late (p. 171). Okina neglects to mention that the delay between fact and announcement is due to the Bank of Japan, which releases key credit figures up to three months after the fact—a delay that has not changed in thirty years, despite the fact that the central bank itself now has real-time access to the data. Most importantly, as Werner (1998d, 1999a, 2002a) has shown, the central bank has used the quantity of credit creation as its central monetary policy operating and target variable at least throughout the period from 1942 to 1991.

62. See also Morsink and Bayoumi (1999).

63. Werner (1992, 1994b, 1995a, 1995b, 1995c, 1997a, 1997c, 1997d, 1997f, 1998f).

64. This is not surprising for two reasons, quantity rationing and the fallacy of composition. Concerning the latter: While interest rates are an exogenous variable for an individual agent, this is not the case for all agents together.

65. See also Werner (1994b, 1996c) for some empirical evidence on the weak correlation between the popular deposit aggregate M2+CD and nominal GDP, compared to an alternative measure of credit. See Werner (1992, 1997d) for a comparison of the velocity of traditional money supply aggregates (falling in the 1980s and 1990s) and the stable velocity of credit used for GDP transactions (M_R).

66. In the case of Japan's economy, with net exports accounting for between 1 and 2 percent of GDP, this is not an unrealistic simplification—but will later be relaxed.

67. *Pluralitas non est ponenda sine necessitas*. William of Ockham (1285–1347), the Oxford University philosopher and famous logician, emphasized this principle of parsimony. Earlier proponents include Artistotle in his *Physics*.

68. As Werner (1991a, 1992, 1994a, 1997d) has shown, bank credit to the real estate sector, nonbank financial institutions, and construction companies was used mainly for financial transactions. Its rise during the 1980s is a good empirical explanation of asset prices and net long-term capital flows in the 1980s and early 1990s. Moreover, using the remainder of bank credit to substitute for MR delivers a constant "real circulation" velocity, demonstrating that it is a good empirical proxy (Werner [1997d]).

69. Here, only shorthand results of the seasonally differenced equations are presented, without the formal tests for stationarity and cointegration and the tests for model reduction. The formal tests show that the key series (such as GDP, money supply, credit) are I(2). Furthermore, credit and GDP are cointegrated. The solved static long-run solution is significant.

70. For instance, Werner (1992, 1994b, 1994c, 1995a, 1995b, 1995c, 1996a, 1996b, 1996c, 1996d, 1996e, 1997a, 1997b, 1997c, 1997d, 1997e). Increases in lending by the formerly twelve government-owned financial institutions (such as the Japan Development Bank, Small Business Finance Corporation, etc.) do not create credit; neither does lending by nonbank financial institutions, such as

life insurers. They are not client institutions of the central bank and merely act as financial intermediaries, similar to investment funds.

71. The Bank of Japan used to refer to its extralegal window guidance credit controls as "quantitative policy" (see the interview with BoJ executive director Toshihiko Fukui, in: *Nihon Keizai Shinbun* [1992a]).

72. The Bank of Japan's argument is seconded by Cargill, Hutchison, and Ito (2000), who concede that there is demand for bank loans but argue that a credit crunch implies that injections of liquidity (base and narrow money expansion) do not increase credit and aggregate lending, despite the existence of demand for bank loans by corporations at prevailing interest rates (p. 121). They thereby neglect the possibility that the central bank, just like a private bank, can also extend credit and hence alleviate any credit crunch, if it so wishes, as Werner (1994b, 1995a, 1995b, 1995c) has argued.

73. According to Werner (1995c, 1996c, 1997a, 1997c, 1998a), the goal to prevent surges in call rates around the fifteenth of the month does not prevent the central bank from implementing exogenous monetary policy by increasing the amount of its credit creation (through increased asset purchases).

74. The central bank has engaged in most of these transactions in the past, demonstrating that they are all technically feasible and deliver the desired impact. See the experience of the Bank of Japan in the early postwar era, when the banking system was faced with an even larger nonperforming loan problem than during the 1990s. Purchasing idle real estate and turning it into parks for public use would support the real estate market, help the banks (which use real estate as collateral), increase credit in the economy (and hence boost economic activity), and increase quality of life in Tokyo, a city that has the lowest per capita park surface area of the major world cities. All this would carry no costs to anyone.

75. McCallum (2001b) agrees that "it is important to recognize that purchase of non-traditional assets is necessary for monetary policy to be helpfully stimulative." Meltzer (1998) and Hayashi (1998) recommend abandoning call rates as operating target and substitution with high-powered money. Similar to Krugman (1998a), Hayashi argues that an inflation target should also be introduced—suggesting that 1 percent growth of the CPI be used. Hayashi's transmission mechanism is also similar to Krugman's, namely, not via direct quantity effects but inflation expectations, triggered by the inflation target, which will lower real interest rates, which in turn will stimulate the economy. Hamada (1999) advises central bank expansion of bond purchases. Fukao (1999) rejects using high-powered money as an operational target due to its large seasonal fluctuation and suggests targeting banks' excess reserves, calculated by subtracting required reserves from total reserves. It remains unclear, though, why seasonally adjusted high-powered money cannot be used. Moreover, the proposals that aim at increasing banks' reserve holdings do not explain how increased reserve holdings by the banks affect the economy positively. Allan Meltzer (1999) and others recommend that the BoJ attempt to weaken the currency by substantial open-market sales of yen and purchases of foreign government bonds (thus presumably arguing less for direct quantity effects, but indirect stimulation of the economy via net exports). Bernanke (2000) argues that the central bank can still stimulate the economy by creating money and purchasing more assets. The transmission,

however, is supposed to operate via higher asset prices—while it is unclear that these higher asset prices would boost economic demand. The empirical size of the so-called wealth effect remains disputed.

76. Werner (1996a, 1996b, 1996c, 1997e, 1999d, 1999f, 1999i).

77. Technically, this could easily be done through the same channels used to settle income and corporate taxes—only in the reverse direction.

78. McCallum (1985) shows that this would be possible without inducing extreme volatility of short-term interest rates, especially if the intermediate target is the path of nominal GDP, and not money stock. This is in line with other authors who have favored nominal GDP targeting of monetary policy, including Meade (1978), Tobin (1980), and Bean (1983). Werner (such as 1995b, 1995c, 2001a) favors nominal GDP growth as target, because it represents the variable that the government, consumers, investors, and businesses care about. Moreover, it does not suffer from as many measurement problems as other potential targets (such as prices or real variables). As mentioned above, many proponents of the "special case" of interest rate policy ineffectiveness support the imposition of an inflation target. By contrast, Svensson (1999), echoing M. Friedman's (1982) advice, argues in favor of a price-level target.

79. Technically, this would be trivial, since all banks settle online with the central bank. The transaction could probably take place in one morning.

80. The central bank could keep those assets on its books at face value ad infinitum. As long as the market value of the assets was higher than zero, the central bank would still gain, as it purchases assets with some value for money that it had created for free. If the value of the assets dropped to zero, the central bank would still break even. While the central bank could freely choose to treat such transactions differently in its accounts (by reporting a loss), there is no logically compelling reason why it should do so (except as a sectarian political argument against conducting this transaction in the first place).

81. This alone will not suffice, according to the moral hazard principle, since the central bank itself faces no punishment, budget constraint, or cost in conducting the bank bailout. This is why it will remain necessary to review the legal status and accountability of the central bank, as is argued below.

82. On the latter, see, for instance, Werner (1998g).

83. Werner (1994b, 1995b, 1995c, 1996b, 1996c, 1997f). Hayashi (1998) argues that the central bank is essentially an agency to which certain functions have been delegated by the government. In this case it does not make sense for the government to issue bonds and pay interest for its borrowing if it could instead (ask the central bank to) print money and pay for fiscal policy through costless, interest-free money creation. Hence the government could "exchange interest-bearing government bonds with interest-free reserves through the central bank's purchase of government bonds," as paraphrased in Okina (1999), p. 172.

84. Independence is not necessarily an obstacle, since a central bank can voluntarily cooperate to support the government's policy. As Bernanke (2000) pointed out, "Cooperation with the fiscal authorities in pursuit of a common goal is not the same as subservience" (p. 163). Unfortunately, there are few examples of such cooperation by independent central banks.

85. The proposal will be useful in cases where resources are unemployed and

actual economic activity is below potential.

86. This is effectively the policy combination adopted by the Reichsbank from 1933 to 1937. Its president, Hjalmar Schacht, appeared to have been well aware of the quantity crowding-out problem of unmonetized fiscal policy. In addition to stepping up the credit creation of the Reichsbank (by purchasing various forms of assets, including government bonds and bonds of other government institutions), Schacht instructed the establishment of government institutions that implemented fiscal spending programs and were funded by the issuance of bills of exchange that were purchased by the banks and the central bank. Funding fiscal expenditure with money creation, as opposed to public bond auctions is called "silent funding" (*geraeuschlose Finanzierung*) in the German tradition. See Werner (2002c).

87. This finding is also consistent with other empirical work, such as Bernanke and Gertler (1999) and McKibbin (1996). Bernanke (2000) attributes "much of Japan's current dilemma to exceptionally poor monetary policymaking" (p. 150).

88. Hamada (2002) laments how the Bank of Japan invited leading economists from all over the world in 2000 to ask for their advice concerning the conduct of its monetary policy. "It is a pity that [the Bank of Japan] has hardly made used of this advice" (p. 71). See also M. Friedman (1982), p. 105.

89. The ever-shifting explanations and counterarguments by the central bank have entangled it in contradictions that are happily ignored by the next spokesperson. This pattern is suggestive of a predetermined policy that spokesmen are required to market to the public. Bernanke (2000) complains that "in recent years BoJ officials have—to a far greater degree than is justified—hidden behind minor institutional or technical difficulties in order to avoid taking action" (pp. 158f). A useful summary of some BoJ staples is Okina (1999). His arguments have since been countered, and were subsequently upgraded by central bank spokesmen such as Yamaguchi (2001a, 2001b, 2001c).

90. For detailed suggestions of U.S. structural reform demands, see, for instance, the reports by the bilateral Structural Impediments Initiative (SII), which was launched in July 1989, with a final report released on July 28, 1990.

91. See also Katz (2001).

92. For an example of a "fiscalist" economist who believes in the fundamental importance of deep structural reforms of Japan's system, see Koo (1995); for an example of a "monetarist" economist who shares this view, see Shinpo (1996).

93. In Hoshi and Patrick (2000) it is argued convincingly that "a sense of impending crises" has triggered a "major transformation" of the Japanese financial system, shifting it "from a bank-centered and relationship-based system to a market-based and competitive system" (p. xi) and triggering "the most surprising and fascinating events of the tumultuous 1990s," namely, the "sharp decrease in the power and position of the hitherto seemingly omnipotent Ministry of Finance, the most powerful and elite central government bureaucracy in a country where bureaucrats rule and politicians simply reigned" (p. 22).

94. This argument has also been made by the IMF, the World Bank, and the Asian Development Bank in the context of the Asian crisis. See, for instance, Kawai and Takayasu (2000). Also note Werner (2000a, 2000b), providing an alternative explanation of the Asian crisis.

95. The Bank of Japan's Okina (1999), for instance, warned: "What monetary policy alone can do is limited. ... The BoJ has taken the utmost efforts to promote monetary easing. ... But monetary policy alone cannot guarantee a return of the economy to a sustainable growth path. To this end, it is essential to solve structural problems" (p. 181). The Bank of Japan's Shirakawa (2001) argues for the need to invoke positive expectations, which can only be created by structural reform. See also deputy governor Yamaguchi (2001c): "In this environment, structural policies are important. ... Expectations for future growth may well be enhanced as structural adjustments take hold" (p. 6).

96. "Strong monetary easing and large-scale fiscal spending were employed continuously during the 1990s. Reflecting such monetary easing, monetary base and money stock continued to increase at a fairly rapid pace compared to the level of economic activity. Japan's economy, however, failed to return to a sustainable growth path. This clearly demonstrates that monetary easing cannot change banks' lending attitude, economic activity, and prices when there are various structural problems." Hayami (2002), p. 4.

97. Deputy governor Fukui argued in 1995 that for a recovery, "there are several deep-rooted structural problems that must be solved. ... To explain the viewpoint of the BoJ in extremely general terms, one must thoroughly deal with the competition-limiting environment that still remains in Japan's economy and society." (*Nikkei Kinyū* [1995]). See also various former Bank of Japan staff, including Saito (1996), Inoue (2000), Kimura (2001); Fukao (1999) is a notable exception.

98. The structural reform agenda always included the change in the central bank law to make the Bank of Japan independent and unaccountable until this goal was achieved in 1998. Mieno explained: "In many countries today ... monetary policy making is entrusted to an independent central bank. This reflects the human wisdom that has been nurtured by history." Mieno (1994), p. 11. On later reform goals, see, for instance, deputy governor Yamaguchi: "The role that the government should play in this is also quite large. ... It is important to deregulate, to review the taxation system drastically, and to ensure that reform of public corporations progresses steadily. Another important challenge is to relieve the anxiety of households about the future by reviewing the social security system, including pension benefits." Yamaguchi (2001c), p. 11. While structural reforms proceeded, the central bankers simply shifted the goal posts. Ultimately, Hoshi and Patrick's seem to be accurate in their assertion that the goal of structural reform is the introduction of a U.S.-style economy. Having achieved "remarkable structural reforms" already, Toshihiko Fukui had further structural change demands up his sleeve: "The tasks that cannot be neglected include a sharp reduction in public works projects, drastic reforms of universities and promotion of academic-industry cooperation, corporate reorganization, creation of a society valuing individual achievement, and improvement of the social safety net" (T. Fukui [2001]).

99. For a typical example of the viewpoint of the leading foreign media, see, for instance, Tett (1998).

100. They included, among others, such measures as the liberalization of foreign exchange transactions, deregulating the sale of investment trust funds, and liberalizing the licensing and fixed commissions of securities companies.

101. Hoshi and Patrick (2000) argue: "The magnitude of the transformation is remarkable. During most of the postwar period, Japan's financial system was characterized by the dominance of bank financing, close relations between banks and their corporate clients, and heavy regulation by the government. That is now becoming what seems to be the opposite: a system where financial institutions compete in capital and other financial markets without heavy intervention from the government" (p. 1).

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